

CATALOG OF ANTIBODIES FOR

GPCR



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Application Key

ELISA - Enzyme-Linked Immunosorbent Assay

FACS - Fluorescent Activated Cell Sorting

Func - Functional Assay

ICC - Immunocytochemistry

IF - Immunofluorescence

IHC - Immunohistochemistry

IHC-Fr - Immunohistochemistry Frozen
IHC-P - Immunohistochemistry Paraffin

IP - Immunoprecipitation

PEP-ELISA - Peptide ELISA

RI - Radioimmunodiffusion

WB - Western Blot

Reactivity Key

Bb - Baboon Ma - Mammal
Bv - Bovine Mk - Monkey

Ca - Canine Mu - Mouse

Ce - C. elegans Po - Porcine

Ch - Chicken Rb - Rabbit

Eq - Equine Rt - Rat

Fe - Feline Sh - Sheep

Gp - Guinea Pig **Xp** - Xenopus

Ha - Hamster **Ze** - Zebra Fish

Hu - Human



Cover Image

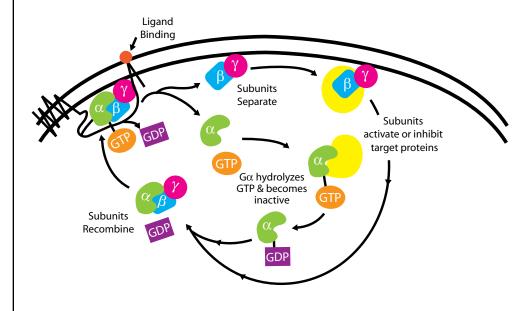
Polarized light micrograph of a transverse tongue section.

G-Protein Coupled Receptors

G-protein coupled receptors (GPCRs) consist of seven transmembrane helices, an extracellular N-terminus and an intracellular C-terminus. The extracellular loops connecting the helices contain two cysteine residues which form stabilizing disulphide bonds. The receptors are coupled to $G\alpha$ proteins which associate with $G\beta$ and $G\gamma$ to form a heterotrimeric complex. GPCRs allow cells to respond to their environment by binding extracellular molecules and activating intracellular signaling cascades. GPCR ligands include light-sensitive compounds, odors, pheromones, hormones, and neurotransmitters. Ligand binding causes a conformational change in the receptor that allows it to act as a guanine exchange factor, trading bound GDP for GTP. The bound GTP activates the G-protein complex, causing the $G\alpha$ subunit to dissociate from the $G\beta$ and $G\gamma$ complex leaving the respective subunit groups with the ability to interact with a wide array of target proteins. GPCRs generally activate one of two main signal transduction pathways: the cAMP signaling pathway or the phosphatidylinositol signaling pathway.

GPCRs have been implicated as signal transducers in a wide array of physiological processes, such as several of the sensory systems where they bind opsins, odorants and tastants. GPCRs also affect behavior and mood regulation through interaction with an array of neurotransmitters, including serotonin and dopamine. GPCRs also mediate the inflammatory response.

There are over 800 distinct GPCRs, making the protein family one of the largest in the mammalian genome. GPCRs are divided into six classes based on sequence homology and similar functionality: Class A/Rhodopsin-Like receptors, Class B/Secretin receptors, Class C/Metabotropic Glutamate/Pheromone receptors, Class D/Fungal Mating Pheromone receptors, Class E/cAMP receptors, Class F/ Frizzled/Smoothened receptors. Over 85% of identified GPCRs are Class A/Rhodopsin-Like receptors.

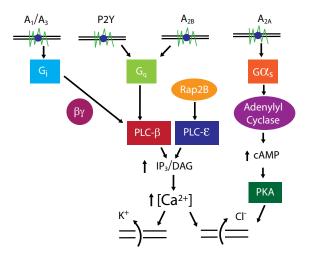


Rhodopsin-Like Receptor Family

The class A GPCR family includes hormone, neurotransmitter and light receptors, which transduce extracellular signals through interactions with G-proteins. Though their activating ligands display wide variation in structure and type, the receptors themselves are comprised of similar amino acid sequences and display a common structural framework of seven transmembrane helices.

Purinergic Receptors

Purinergic receptors bind derivatives of the nucleotide adenosine. There are three broad subtypes of purinergic receptors: P1 receptors, which bind adenosine; P2Y receptors, which bind ATP, ADP, UTP, and UDP; and P2X receptors, which bind ATP. Purinergic receptors have been implicated in a wide array of biological processes including keratinocyte proliferation, differentiation and apoptosis in human fetal epidermis, modulation of peripheral auditory and visual sensory systems, vascular reactivity, apoptosis and cytokine secretion.



Adenosine Receptor A1 Antibody NLS11



Immunohistochemical analysis of rat brain (purkinje neurons) using NLS11.

Species: Hu Applications: IHC-P

Adenosine Receptor A2a Antibody NB600-797



Immunohistochemical analysis of human kidney using NB600-797.

Species: Hu Applications: WB, IHC-P, PEP-ELISA

P2RY9 Antibody NLS1895



Immunohistochemical analysis of human melanoma using NLS1895.

Applications: FACS, IHC-P

Catalog#	Product	Host	Туре	Application	Species
NB300-549	Adenosine Receptor A1	Rabbit	Polyclonal	IP, WB, IHC-P	Bv, Hu, Rt
NBP1-00702	Adenosine Receptor A1	Rabbit	Polyclonal	ELISA, WB	Hu, Rt
NBP1-00149	Adenosine Receptor A1	Goat	Polyclonal	ELISA	Hu, Mu, Rt, Ca
NB100-2548	Adenosine Receptor A2a	Goat	Polyclonal	ELISA, WB	Нυ
NBP1-00703	Adenosine Receptor A2a	Rabbit	Polyclonal	ELISA, IHC, WB	Нυ
NB600-797	Adenosine Receptor A2b	Goat	Polyclonal	ELISA, WB, IHC-P	Нυ
NBP1-00704	Adenosine Receptor A2b	Rabbit	Polyclonal	ELISA, WB	Нυ
NLS689	Adenosine Receptor A3	Rabbit	Polyclonal	IHC-P	Ηυ
NBP1-00705	Adenosine Receptor A3	Rabbit	Polyclonal	ELISA, WB	Нυ
NLS88	GPR17	Rabbit	Polyclonal	ICC, IHC-P	Нυ
NLS1620	GPR86	Rabbit	Polyclonal	ICC, IHC-P	Нυ
NLS4853	GPR86	Rabbit	Polyclonal	IHC-P	Нυ
NB100-79864	P2RY1	Goat	Polyclonal	ELISA	Ca, Hu, Mu, Rt
NLS3795	P2RY1	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Нυ
NB110-39032	P2RY2	Rabbit	Polyclonal	IHC, WB	Hu, Mu, Rt
H00005029-B02	P2RY2	Mouse	Polyclonal	ELISA, WB	Нυ
NLS5011	P2RY4	Rabbit	Polyclonal	IHC-P	Нυ
NLS877	P2RY6	Rabbit	Polyclonal	ICC, IHC-P	Нυ
H00286530-B02	P2RY8	Mouse	Polyclonal	ELISA, WB	Hυ
NLS1918	P2RY8	Rabbit	Polyclonal	IHC-P	Нυ
NLS862	P2RY10	Rabbit	Polyclonal	IHC-P	Нυ
H00027334-B01	P2RY10	Mouse	Polyclonal	ELISA, WB	Нυ
NLS866	P2RY11	Rabbit	Polyclonal	IHC-P	Нυ
NB110-55584	P2RY12	Rabbit	Polyclonal	IHC	Ни
NLS3742	P2RY12	Rabbit	Polyclonal	ICC, IHC-P	Hu

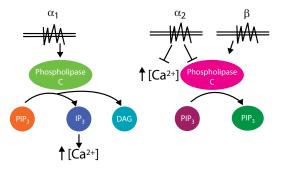
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Adrenergic Receptors

The adrenergic receptors (adrenoceptors) are targets of catecholamines, excluding dopamine. They have a particularly high affinity for noradrenaline (norepinephrine) and adrenaline (epinephrine). Binding of an agonist to one of these receptors generally triggers a sympathetic (fight-or-flight) response.



Catalog#	Product	Host	Туре	Application	Species
H00000148-M02	ADRA1A (5G8)	Mouse	Monoclonal	ELISA, WB	Hu
NB100-78585	ADRA1A	Rabbit	Polyclonal	WB	Hu
NB120-15851	ADRA1B	Chicken	Polyclonal	WB	Hu
NLS1248	ADRA1C	Rabbit	Polyclonal	IHC, ICC	Ηυ
NLS12	ADRA1D	Goat	Polyclonal	IHC-P, IHC-Fr	Hu, Mu
NB100-2819	ADRA2A	Rabbit	Polyclonal	WB, PEP-ELISA	Mu
NB110-39031	ADRA2C	Rabbit	Polyclonal	IHC, WB	Hu, Mu, Ri
NB600-978	ADRB1	Goat	Polyclonal	PEP-ELISA, WB	Hu
NBP1-04719	ADRB1	Rabbit	Polyclonal	ELISA	Hυ
NB100-2424	ADRB2	Goat	Polyclonal	ELISA, WB	Hυ
NB100-93369	ADRB3	Goat	Polyclonal	ELISA, WB	Hu
NLS4195	ADRB3	Rabbit	Polyclonal	IHC-P	Ни

ADRA1B Antibody NLS698



Species: Hu Applications: IHC-P

Immunohistochemical analysis of medullary collecting duct using NLS698.

ADRA1B Antibody NB600-978



Species: Hu Applications: WB, PEP-ELISA

Western blot analysis of human heart lysate using NB600-978.

5-Hydroxytryptamine Receptors

5-hydroxytryptamine (5-HT) receptors, also known as serotonin receptors, are found in the central and peripheral nervous systems where they mediate neurotransmission. Based on their pharmalogical profiles, the 5-HT receptors have been organized into seven classes (5-HT1 through 5-HT7). Serotonin receptors have been implicated in a wide array of biological and neurological processes including appetite, mood, nausea, sleep, and sexuality.

5-HTR1D Antibody NB100-56349



Species: Hu, Mu, Rt Applications: WB

Western blot analysis of 5-HT1DR in brain lysate using NB100-56349.

5-HTR2B Antibody NLS1187



Species: Hu Applications: IHC-P

Immunohistochemical analysis of kidney, renal tubules using NLS1187.

5-HTR1F Antibody NLS3344



Species: Hu Applications: IHC-P

Immunohistochemical analysis of kidney, renal tubules using NLS3344.

5-HTR2C Antibody NB100-1524



Species: Hu Applications: WB, PEP-ELISA

Western blot analysis of EBV immortalised lymphoblastoid lysate using NB100-1524.

Catalog#	Product	Host	Туре	Application	Species
H00003350-A01	5-HTR1A	Mouse	Polyclonal	ELISA, WB	Hu
NB100-1890	5-HTR1A	Goat	Polyclonal	PEP-ELISA, WB	Нυ
H00003351-A01	5-HTR1B	Mouse	Polyclonal	ELISA, WB	Hu
NLS598	5-HRT1B	Rabbit	Polyclonal	IHC-P	Hu
NB100-41091	5-HTR1B	Goat	Polyclonal	PEP-ELISA, WB	Hu
NB100-56349	5-HTR1D	Rabbit	Polyclonal	WB	Hu, Mu, Rt
H00003354-B01	5-HTR1E	Mouse	Polyclonal	ELISA, WB	Hu
NBP1-02660	5-HTR1E	Rabbit	Polyclonal	IHC	Hu
NBP1-02371	5-HTR1F	Rabbit	Polyclonal	IHC	Hu
NLS3344	5-HTR1F	Goat	Polyclonal	IHC-P	Hu
NBP1-20933	5-HRT2A	Goat	Polyclonal	PEP-ELISA	Hu
H00003357-M09	5-HTR2B	Mouse (4F3)	Monoclonal	ELISA, WB	Hu
NLS1111	5-HTR2B	Rabbit	Polyclonal	IHC-P	Hu
H00003358-A01	5-HTR2C	Mouse	Polyclonal	ELISA, WB	Hu
H00003358-M02	5-HTR2C	Mouse (1A8)	Monoclonal	ELISA, WB	Hu
NB100-1524	5-HTR2C	Goat	Polyclonal	PEP-ELISA, WB	Hu
NLS1115	5-HTR2C	Rabbit	Polyclonal	IHC, IHC-P	Hu
H00003360-B01	5-HTR4	Mouse	Polyclonal	ELISA, WB	Hu
NLS656	5-HTR4	Rabbit	Polyclonal	IHC	Hu, Mu, Rt
H00003361-M01	5-HTR5A	Mouse (10D3)	Monoclonal	ELISA, WB	Hu
H00003361-M02	5-HRT5A	Mouse (4A9)	Monoclonal	ELISA, WB	Hu
NLS2121	5-HTR5A	Rabbit	Polyclonal	IHC-P	Hu
NLS650	5-HTR6	Rabbit	Polyclonal	IHC-P	Hu
NLS6674	5-HTR7	Rabbit	Polyclonal	IHC-P	Hu
NB100-59016	5-HTR7	Rabbit	Polyclonal	IHC-P	Hu, Mu

Neuropeptide Receptors

Neuropeptides function as intracellular signalling molecules. Neuropeptides have a wide array of effects – they can alter gene expression, local blood flow, synaptogenesis and glial cell morphology. Neuropeptides are packaged in large, dense-core vesicles and are located on every part of a neuron, including the soma, dendrites, axonal swellings and nerve endings.

Catalog#	Product	Host	Туре	Application	Species
NLS825	Neuromedin B Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS1822	Neuromedin K Receptor-Like	Rabbit	Polyclonal	IHC-P	Нυ
NLS397	NMUR1	Rabbit	Polyclonal	IHC-P	Ни
NLS396	NMUR1	Rabbit	Polyclonal	IHC-P	Нυ
NLS422	NMUR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS423	NMUR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS1905	NPFFR1	Rabbit	Polyclonal	IHC-P	Нυ
NB100-93424	NPFFR1	Goat	Polyclonal	ELISA, WB	Нυ
NLS463	NPFFR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS171	NPBWR1	Rabbit	Polyclonal	IHC-P	Нυ
NB100-59035	NPBWR1	Rabbit	Polyclonal	IHC-P	Hu, Mu
NLS6636	NPBWR2	Rabbit	Polyclonal	IHC-P	Hu
NLS175	NPBWR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS1065	NPYR1	Rabbit	Polyclonal	IHC-P	Hu
NLS1064	NPYR1	Rabbit	Polyclonal	IHC-P	Hu
NB100-57847	NPYR2	Goat	Polyclonal	ELISA, WB	Mu, Rt, Ca, Hu
NLS1061	NPYR2	Rabbit	Polyclonal	IHC-P	Hu
NLS1071	NPYR4	Rabbit	Polyclonal	IHC-P	Hu
NLS1069	NPYR4	Rabbit	Polyclonal	IHC-P	Ни
NB100-1538	NPYR5	Goat	Polyclonal	PEP-ELISA, WB	Hu
NLS1075	NPYR5	Rabbit	Polyclonal	WB, ICC, IHC-P, IHC-Fr	Hu
NLS938	Neurotensin Receptor 1	Rabbit	Polyclonal	IHC-P	Hu
NLS935	NTSR1	Rabbit	Polyclonal	IHC-P	Hu
NLS3747	NTSR2	Rabbit	Polyclonal	IHC-P	Ни
NB100-56472	NTSR2	Rabbit	Polyclonal	WB, IHC-P	Hu, Mu, Bv
H00387129-M01	NPSR1/GPR154 (2F5)	Mouse	Monoclonal	ELISA, WB	Hu
H00387129-A01	NPSR1/GPR154	Mouse	Polyclonal	ELISA, WB	Ни

NMUR2 Antibody NBP1-02351



Immunohistochemical analysis of human adrenal gland using NBP1-02351.

Species: Hu Applications: IHC

Neuropeptide Y Receptor Type 1 Antibody NLS1064



Immunohistochemical analysis of human colon eithelium using NLS1064.

Species: Hu Applications: IHC-P

NPBWR1 Antibody NB100-59035



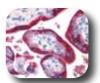
Immunohistochemical analysis of human brain cerebellum using NB100-59035.

Species: Hu, Mu Applications: IHC-P

Bombesin Receptors

This class of receptors is located largely in the central nervous system and the gastrointestinal tract. These GPCR molecules bind a peptide ligand that is homologous to Bombesin, which was discovered in frog's skin. Two human homologs are known at this time, neuromedin B and gastrin releasing peptide. Bombesin receptors mediate the nuerological anxiety response, as well as smooth muscle contraction and eating behavior. Levels of these ligands have also been implicated in many neurodegenerative diseases.

BRS3 Antibody NLS4915



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human placenta using NLS4915.

BRS3 Antibody NBP1-02374



Species: Hu Applications: IHC

Immunohistochemical analysis of human pancreas islet cells using NBP1-02374.

NMBR Antibody NLS825



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human olfactory bulb using NLS825.

Catalog#	Product	Host	Туре	Application	Species
NLS5055	BRS3	Rabbit	Polyclonal	IHC-P	Hu
NB100-58984	BRS3	Rabbit	Polyclonal	IHC-P	Hu
NB100-58999	BRS3	Rabbit	Polyclonal	IHC-P	Hu, Rt, Mu
NBP1-02326	BRS3	Rabbit	Polyclonal	IHC	Нυ
NBP1-02397	BRS3	Rabbit	Polyclonal	IHC	Нυ
H00000680-A01	BRS3	Mouse	Polyclonal	ELISA, WB	Нυ
NB100-74372	BRS3	Rabbit	Polyclonal	WB, IHC-P	Нυ
NLS831	GRPR	Rabbit	Polyclonal	IHC-P	Hu, Rt, Mu
NB100-74434	GRPR	Rabbit	Polyclonal	WB, IHC-P	Нυ
NLS825	NMBR	Rabbit	Polyclonal	IHC-P	Нυ
NLS828	NMBR	Rabbit	Polyclonal	IHC-P	Нυ
NBP1-00952	NMBR	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Ri

Muscarinic Acetylcholine Receptors

Acetylcholine (ACh) is an abundant neurotransmitter, found in the central nervous system, autonomic preganglia and spinal motor neurons. There are two main subtypes of ACh receptors – nicotinic and muscarinic. Muscarinic receptors (mAChRs) are responsible for the subsequent hyperpolarization and slow depolarization of the postganglionic neuron post-stimulation. mAChRs modulate an array of physiological functions, including smooth muscle contractions, heart rate, and glandular secretions. On the molecular level, the receptors mediate adenylate cyclase attenuation, calcium and potassium channel activation, and phosphatidyl inositol turnover. Muscarinic receptors can be classified into four subtypes, designated M1 through M5. The M1, M2 and M4 subtypes are the predominant receptors in the central nervous system.

Catalog#	Product	Host	Туре	Application	Species
NB100-41399	CHRM1	Goat	Polyclonal	PEP-ELISA, WB	Hu
NB300-628	CHRM1	Rabbit	Polyclonal	WB	Mu
NB120-2805	CHRM2 (31-1D1)	Mouse	Monoclonal	IP, WB	Hu, Rt, Mu, Po
H00001129-B01	CHRM2	Mouse	Polyclonal	ELISA, WB	Нυ
H00001129-A01	CHRM2	Mouse	Polyclonal	ELISA, WB	Hu
NLS1331	CHRM2	Rabbit	Polyclonal	IHC-P	Hu
NB100-58976	CHRM3	Rabbit	Polyclonal	IHC-P	Hu, Mu
NB100-58977	CHRM3	Rabbit	Polyclonal	IHC-P	Hu
H00001131-A01	CHRM3	Mouse	Polyclonal	ELISA, WB	Hu
NLS219	CHRM4	Rabbit	Polyclonal	IHC-P	Hu
NLS220	CHRM4	Rabbit	Polyclonal	IHC-P	Hu
NLS1334	CHRM5	Rabbit	Polyclonal	IHC-P	Hu
NLS1338	CHRM5	Rabbit	Polyclonal	IHC-P	Hυ

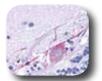
CHRM3 Antibody NLS5259



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human hyper-plastic smooth muscle using NLS5259.

CHRM4 Antibody NLS219



Species: Hu Applications: IHC-P

Immunohistochemical analysis of cerebellum (purkinje neuron) using NLS219.

Dopamine Receptors

Many neurological responses are modulated by dopamine signaling. Levels of dopamine have both neurological and physical consequences. There are two families of dopamine receptors: the D1-like family (D1 and D5) and the D2-like family (D2 through D4). Activation of receptors in the D1-like family activates adenylyl cyclase, increasing the intracellular concentration of cAMP. Conversely, activation of receptors in the D2-like family inhibits the formation of cAMP by inhibiting adenylate cyclase.

Dopamine Receptor D1 Antibody NB110-60017



Western blot analysis of Sf9 cells transfected with rat D1 using NB110-60017. Lane 1: Sf9-D1a lysate Lane 2: Sf9-D1b lysate

Applications: IF, WB, ICC

Dopamine Receptor D1 Antibody NLS44



Immunohistochemical analysis of human kidney (proximal and distal convoluted tubules) using NLS44.

Applications: ICC, IHC-P

Dopamine Receptor D5 Antibody NLS1407



Immunohistochemical analysis of rat brain (purkinje neurons) using NLS1407.

Species: Hu, Rt Applications: IHC-P

Galanin Receptors

Galanin is an inhibitory neuropeptide that reduces the excitability of target cells. Galanin reduces the stimulatory effects of muscarinic agonists on phospholipase C and modulates the activity of adenylyl cyclase. Galanin receptors are expressed throughout the peripheral and central nervous systems and in the endocrine system. Three subtypes of the galanin receptor have been identified: GALR1, GALR2, and GALR3.

Catalog#	Product	Host	Гуре	Application	Species
NLS4105	GALR1	Rabbit	Polyclonal	ICC, IHC-P	Hu
NLS6168	GALR1	Rabbit	Polyclonal	IHC-P	Hu
NB100-57079	GALR1	Goat	Polyclonal	ELISA, WB	Ни
NLS4155	GALR2	Rabbit	Polyclonal	IHC-P	Ни
NLS4156	GALR2	Rabbit	Polyclonal	IHC-P	Hu
NB100-57081	GALR2	Goat	Polyclonal	ELISA, WB	Hu, Ca, Mu, Rt
NLS204	GALR3	Rabbit	Polyclonal	IHC-P	Hu, Rt
NB100-2846	GALR3	Goat	Polyclonal	ELISA, WB	Hu

GALR1 Antibody NB100-57080

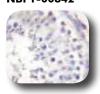


analysis of rat spinal cord lysate using NB100-57080.

Western blot

Species: Hu, Mu, Rt Applications: ELISA, WB

GALR2 Antibody NBP1-00842



Immunohistochemical analysis of human tonsil tissue using NBP1-00842.

Species: ELISA, WB Applications: Hu, Mu, Rt

Eicosanoid Receptors

Cyclooxygenase (COX) and lipoxygenase (LOX) catalyze essential fatty acid oxygenation to synthesize eicosanoids. Leukotrienes and oxoeicosanoids, two families of eicosanoids, convey signals via autocrine and paracrine pathways to regulate the immune response, contributing to inflammation in both asthma and bronchitis. Lipoxins, another type of eicosanoid, are anti-inflammatory mediators that signal macrophages to the remains of cells killed by inflammation-induced apoptosis. The fourth family of eicosanoids is prostanoids, which include prostaglandins (mediators of inflammatory and anaphylactic reactions), thromboxanes (mediators of vasoconstriction), and prostacyclins (involved in the resolution phase of inflammation).

Catalog#	Product	Host	Туре	Application	Species
NLS1278	Thromboxane A2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS1280	Thromboxane A2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS1317	Cysteinyl Leukotriene Receptor 1	Rabbit	Polyclonal	IHC-P	Hu
NBP1-00775	Cysteinyl Leukotriene Receptor 1	Rabbit	Polyclonal	ELISA, WB	Hu
NBP1-00777	Cysteinyl Leukotriene Receptor 2	Rabbit	Polyclonal	ELISA, WB	Hu
NBP1-02650	Cysteinyl Leukotriene Receptor 2	Rabbit	Polyclonal	IHC	Hu
NLS1878	Formyl Peptide Receptor-Like 1	Rabbit	Polyclonal	IHC-P	Hu, Mu
NB100-94885	Formyl Peptide Receptor-Like 1	Goat	Polyclonal	ELISA, WB	Hu
H00002358-B01	Formyl Peptide Receptor-Like 1	Mouse	Polyclonal	ELISA, WB	Hu
H00002358-M02	Formyl Peptide Receptor-Like 1 (2D8)	Mouse	Monoclonal	ELISA, WB	Hu
NLS1494	Leukotriene B4 Receptor 1	Rabbit	Polyclonal	IHC-P	Hu
NLS1492	Leukotriene B4 Receptor 1	Rabbit	Polyclonal	IHC-P	Hu
NLS1495	Leukotriene B4 Receptor 1	Rabbit	Polyclonal	IHC-P	Hu, Rt
NB100-78611	Leukotriene B4 Receptor 1	Rabbit	Polyclonal	WB	Hu
NLS2099	Leukotriene B4 Receptor 2	Rabbit	Polyclonal	IHC-P	Hu
NLS2097	Leukotriene B4 Receptor 2	Rabbit	Polyclonal	IHC-P	Hu
NLS458	Prostaglandin D2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS503	Prostaglandin D2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NB600-979	Prostaglandin E Receptor EP1	Goat	Polyclonal	PEP-ELISA	Hu
NLS968	Prostaglandin E Receptor EP2	Rabbit	Polyclonal	IHC-P	Hu
NLS975	Prostaglandin E Receptor EP3	Rabbit	Polyclonal	IHC-P	Hu
NB100-58958	Prostaglandin E Receptor EP3	Goat	Polyclonal	ELISA, WB	Ca, Hu
NLS3898	Prostaglandin E Receptor EP4	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Hu
NLS1049	Prostaglandin F2-alpha Receptor	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Hu
NLS6624	Prostaglandin F2-alpha Receptor	Rabbit	Polyclonal	IHC-P	Hυ
NLS4395	Prostaglandin F2-alpha Receptor	Rabbit	Polyclonal	IHC-P	Hυ
H00005739-M01	Prostaglandin F2-alpha Receptor (4B10)	Mouse	Monoclonal	ELISA, WB, IHC-P	Hu
NLS2272	OXER1	Rabbit	Polyclonal	IHC-P	Hυ
NBP1-02658	OXER1	Rabbit	Polyclonal	IHC	Hu
H00165140-B01	OXER1	Mouse	Polyclonal	ELISA, WB	Нυ

Cysteinyl Leukotriene Receptor 1 Antibody NLS1317

Immuno-



histochemical analysis of human nasal mucosa (allergic rhinitis eosinophils) using NLS1317.

Species: Hu Applications: IHC-P

Formyl Peptide Receptor-Like 1 Antibody NLS1878



Immunohistochemical analysis of bone marrow using NLS1878.

Species: Hu, Mu Applications: IHC-P

Thromboxane A2 Receptor Antibody NBP1-02341



Immunohistochemical analysis of human artery (smooth muscle) using NBP1-02341.

Species: Hu Applications: IHC

Cannabinoid Receptors

Cannabinoids are a group of terpenophenolic compounds present in the nervous and immune systems that bind cannabinoid receptors. There are two defined types of cannabinoid receptors, designated CB1 and CB2, and there is evidence that other types may exist. CB1 receptors are considered the most widely expressed GPCRs in the brain; CB1 receptors in the pre-synaptic neuron bind endocannabinoids released from a single depolarized neuron, causing a reduction in GABA release. CB2 receptors are found in the immune system, particularly in the spleen.

Catalog#	Product	Host	Туре	Application	Species
NB300-552	Cannabinoid Receptor 1	Rabbit	Polyclonal	WB, ICC	Hu, Rt
NLS31	Cannabinoid Receptor 1	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Hu, Mk, Rt
NB120-23703	Cannabinoid Receptor 1	Rabbit	Polyclonal	WB, IHC-P	Bv, Ca, Hu, Mu, Rt
H00001268-B01	Cannabinoid Receptor 1	Mouse	Polyclonal	ELISA, WB	Hu
H00001268-M02	Cannabinoid Receptor 1 (1F9)	Mouse	Monoclonal	ELISA, WB	Hu
NB300-606	Cannabinoid Receptor 2	Rabbit	Polyclonal	WB, ICC	Hu
NB300-607	Cannabinoid Receptor 2	Rabbit	Polyclonal	FACS, ICC	Hu, Rt
NLS34	Cannabinoid Receptor 2	Rabbit	Polyclonal	IHC-P	Hu

Cannabinoid Receptor 2 Antibody NB300-607



Immunolocalization of CB2 in AtT20 cells transfected with the rat CB2 gene using NB300-607.

Species: Hu, Rt Applications: FACS, ICC

Chemokine Receptors

Chemokine receptors are located on the surface of leukocytes. Chemokine receptors are divided into four categories (CXCRs, CCRs, CX3CRs, and XCRs) depending on the type of ligand that they bind. The binding of a chemokine triggers responses such as chemotaxis, degranulation, and release of superoxide anions. Such binding also changes the avidity of cell adhesion molecules, known as integrins, within the receptor-containing cell. Some chemokines are pro-inflammatory and can be induced as part of the immune response to promote migration of immune cells to the site of infection. Other chemokines are homeostatic and are involved in the control of cell migration during normal tissue maintenance and developmental processes.

Catalog#	Product	Host	Туре	Application	Species
NLS1242	CCR1	Rabbit	Polyclonal	IHC-P	Hu
NLS1898	CCR2	Rabbit	Polyclonal	IHC-P	Нυ
NB120-16231	CCR3 (5E8)	Mouse	Monoclonal	FACS, IF	Ни
NLS351	CCR4	Rabbit	Polyclonal	IHC, IHC-P	Нυ
NB100-92491	CCR5	Rabbit	Polyclonal	ELISA, IHC, WB	Hu, Mu, Rt
NB120-11466	CCR5 (HEK/1/85a), FITC	Rat	Monoclonal	FACS	Ни
NBP1-04271	CCR6 (4C6)	Mouse	Monoclonal	ELISA, WB	Ни
NLS848	CCR7	Rabbit	Polyclonal	IHC, ICC, IHC-P	Ни
NB110-55682	CCR8 (E77)	Rabbit	Monoclonal	FACS, IP, WB, ICC	Hu, Rt
NLS958	CCR9	Rabbit	Polyclonal	IHC-P	Нυ
NB100-58971	CCR10	Rabbit	Polyclonal	IHC-P	Ни
NLS1442	CCRL1	Rabbit	Polyclonal	IHC-P	Ни
NLS1093	CCRL2	Rabbit	Polyclonal	IHC-P	Ни
NB300-697	CXCR1	Rabbit	Polyclonal	IHC, IP, WB	Hu, Mu, Mk, Rt
NB100-1631	CXCR2 (48311.211)	Mouse	Monoclonal	FACS	Ни
NB300-696	CXCR2	Rabbit	Polyclonal	IP, WB, IHC-Fr	Hu, Mu, Rt
NB100-1630	CXCR3 (49801.111)	Mouse	Monoclonal	FACS	Ни
NB100-60943	CXCR3	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NB100-715	CXCR4	Goat	Polyclonal	ELISA, IHC, WB, ICC	Ми
NB100-1632	CXCR4 (44716.111)	Mouse	Monoclonal	FACS, IF, ICC, IHC-Fr	Hu, Fe
NLS1385	CXCR5	Rabbit	Polyclonal	IHC-P, IHC-Fr	Ни
NB100-78599	CXCR6	Rabbit	Polyclonal	WB	Ни
NB100-55762	CX3CR1	Rabbit	Polyclonal	WB, IHC-P	Hu, Mu, Rt
NB100-75188	CX3CR1	Chicken	Polyclonal	WB	Hu
H00001524-B01	CX3CR1	Mouse	Polyclonal	ELISA, IF	Ни
NBP1-02343	XCR1	Rabbit	Polyclonal	IHC	Ни
NBP1-02345	XCR1	Rabbit	Polyclonal	IHC	Нυ

CCR5 (V14/2) Antibody NB100-78045



Flow cytometric analysis of PMAstimulated human peripheral blood lymphocytes intracellular stained using NB100-78045.

Species: Hu using N Applications: FACS, ELISA, IF

CCR8 (E76) Antibody NB110-55681



Immunofluorescent staining of HeLa cells using NB110-55681.

Species: Hu, Mu Applications: WB, ICC

XCR1 Antibody NBP1-02343



Immunohistochemical analysis of human spleen using NBP1-02343.

Species: Mu Applications: IHC

Kinin Receptors

Kinins are polypeptides produced at the site of tissue injury or inflammation. Kinins are involved in vasodilation, increased vascular permeability and the stimulation of immune cells and pain-inducing sensory neurons. Kinins influence pain signaling both within the brain and within the spinal dorsal horn. Bradykinins act via the activation of two different subtypes of receptors, B1 and B2. Tachykinins act via the activation of three receptor subtypes: NK-1, NK-2 and NK-3, which have preferential affinities for substance P, neurokinin A and neurokinin B.

BDKRB1 Antibody NB100-96919



Species: Hu Applications: ELISA, WB

Western blot analysis of K562 lysate using NB100-96919.

Substance P Receptor Antibody NB300-119



Species: Hu, Rt Applications: FACS, IHC

Immunohistochemical analysis of brain (basal nucleus of meynert) neurons using NB300-119.

Catalog#	Product	Host	Туре	Application	Species
NB100-96919	BDKRB1	Goat	Polyclonal	ELISA, WB	Hu
H00000623-B01	BDKRB1	Mouse	Polyclonal	ELISA, WB	Hu
NLS797	BDKRB2	Rabbit	Polyclonal	ICC, IHC-P	Ни
NB300-102	Neurokinin B Receptor	Rabbit	Polyclonal	IHC-Fr	Mu, Rt, Gp
NB300-119	Substance P Receptor	Rabbit	Polyclonal	FACS, IHC	Hu, Rt
NLS1339	TACR1	Rabbit	Polyclonal	IHC	Ни
NB100-60558	TACR1	Goat	Polyclonal	ELISA, WB	Hu, Ca, Mu, Rt
H00006869-M10	TACR1 (1F7)	Mouse	Monoclonal	ELISA	Ни
NBP1-00244	TACR2	Goat	Polyclonal	ELISA, WB	Hu, Bv
NB100-58992	TACR2	Rabbit	Polyclonal	IHC-P	Hu, Rt
NLS4043	TACR3	Rabbit	Polyclonal	IHC-P	Hu

Endothelin Receptors

Endothelins are a family of vasoactive peptides that mediate one of the strongest mammalian vasoconstrictive responses. Three types of endothelin receptors have been identified: ETA, ETB1 and ETB2. Activation of an endothelin receptor results in an increase in the level of intracellular free calcium.

Catalog#	Product	Host	Туре	Application	Species
NLS4072	Endothelin A Receptor	Rabbit	Polyclonal	IHC-P	Hu
NB600-836	Endothelin A Receptor	Sheep	Polyclonal	IHC, IF, IP, ICC	Hu, Mu, Sh
NB100-62541	Endothelin A Receptor	Rabbit	Polyclonal	ELISA	Ни
NB100-66414	Endothelin A Receptor	Sheep	Polyclonal	ELISA, WB	Hu
H00001909-A01	Endothelin A Receptor	Mouse	Polyclonal	ELISA, WB	Hu
H00001909-M02	Endothelin A Receptor (2A5)	Mouse	Monoclonal	ELISA, WB	Нυ
NLS55	Endothelin B Receptor	Rabbit	Polyclonal	IHC-P	Ни
NLS57	Endothelin B Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS405	Endothelin B Receptor	Rabbit	Polyclonal	IHC	Hu
NLS406	Endothelin B Receptor	Rabbit	Polyclonal	IHC-P	Hu
NB110-68191	Endothelin B Receptor	Rabbit	Polyclonal	WB, IHC-Fr	Rt

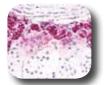
Endothelin A Receptor Antibody NLS4073



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human heart using NLS4073.

Endothelin B Receptor Antibody NLS56



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human adrenal gland using NLS56.

Histamine Receptors

Histamine is a biogenic amine that is involved in local immune responses, digestive regulation and neurotransmission. There are four types of histamine receptors, designated H1 through H4. The H1 receptor is expressed on smooth muscle and central nervous system tissue where it mediates responses such as vasodilation and bronchoconstriction. The H2 receptor is found on parietal cells where it stimulates gastric acid secretion. The H3 receptor decreases the release of neurotransmitters in the central nervous system. The H4 receptor is located primarily in basophils and bone marrow where it plays a role in chemotaxis.

H1 Receptor Antibody NBP1-00868



Species: Hu Applications: ELISA, WB

Western blot analysis of COLO205 cells using NBP1-00868.

H2 Receptor Antibody NLS1175



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human stomach (parietal cells) using NLS1175.

Catalog#	Product	Host	Туре	Application	Species
NLS1167	H1 Receptor	Rabbit	Polyclonal	IHC	Hu
NBP1-06039	H1 Receptor	Goat	Polyclonal	ELISA, WB	Hu
NBP1-00868	H1 Receptor	Rabbit	Polyclonal	ELISA, WB	Ηυ
H00003269-M03	H1 Receptor (3D1)	Mouse	Monoclonal	ELISA, WB	Hυ
NLS1175	H2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS1176	H2 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NB100-65468	H2 Receptor	Rabbit	Polyclonal	WB, IHC-Fr	Hu
NLS475	H3 Receptor	Rabbit	Polyclonal	WB, IHC-P	Hu
NLS476	H3 Receptor	Rabbit	Polyclonal	IHC, ICC	Hυ
NB600-796	H3 Receptor	Goat	Polyclonal	PEP-ELISA, WB	Hu, Gp
NBP1-00869	H3 Receptor	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NLS1901	H4 Receptor	Rabbit	Polyclonal	IHC-P	Hu
NLS3785	H4 Receptor	Rabbit	Polyclonal	IHC-P	Hu

Melanocortin Receptors

The melanocortin system is involved in adrenal function and skin pigmentation and has a putative role in the regulation of energy balance. Five subtypes of melanocortin receptors have been identified: MC1R through MC5R.

Melanocortin 1 Receptor Antibody NLS1039



Immunohistochemical analysis of human melanoma using NLS1039.

Species: Hu Applications: IHC-P

Melanocortin 2 Receptor Antibody NB100-93419



Western blot analysis of human skin lysate using NB100-93419.

Species: Hu Applications: WB, PEP-ELISA

Melanocortin 5 Receptor Antibody NLS1022



Immunohistochemical analysis of human testis (spermatogenic series) using NLS1022.

Species: Hu Applications: IHC-P

Lysophospholipid Receptors

Lysophospholipid (LPL) receptors bind the extracellular signaling molecules lysophosphatidic acid (LPA) and sphingosine-1-phosphate (S1P). Ligand binding inhibits adenylyl cyclase and triggers the release of calcium from the endoplasmic reticulum. These signaling events contribute to increased cell proliferation and the prevention of apoptosis. There are eight LPL receptors, three of which specifically bind LPA and five that bind S1P. LPL receptors are often referred to as Edg, which stands for endothelial differentiation gene.

Catalog#	Product	Host	Туре	Application	Species
NB110-93513	EDG1 (M0044-7M15)	Mouse	Monoclonal	FACS, WB, IHC-P	Ни
NBP1-00786	EDG1	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NBP1-03363	EDG2	Rabbit	Polyclonal	WB	Bv, Ch, Hu, Mu, Rt, Sh
NLS1014	EDG2	Rabbit	Polyclonal	IHC-P	Ни
NLS1031	EDG3	Rabbit	Polyclonal	IHC-P, ICC	Нυ
NBP1-00789	EDG3	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NLS3759	EDG4	Rabbit	Polyclonal	ICC, IHC-P	Нυ
NBP1-00791	EDG4	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NBP1-00793	EDG5	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NLS70	EDG6	Rabbit	Polyclonal	IHC-P	Нυ
NBP1-00795	EDG6	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NBP1-00796	EDG7	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NBP1-02584	EDG8	Rabbit	Polyclonal	ELISA, IHC-P	Ни
NLS1895	P2Y9	Rabbit	Polyclonal	FACS, IHC-P	Ни
NBP1-02406	GPR23	Rabbit	Polyclonal	IHC	Нυ
NLS426	GPR92	Rabbit	Polyclonal	IHC-P	Нυ

EDG2 Antibody NLS211



Immunohistochemical analysis of human lung using NLS211.

Species: Hu Applications: IHC-P

EDG7 Antibody NLS1014



Immunohistochemical analysis of human prostate using NLS1014.

Species: Hu Applications: IHC-P

Olfactory Receptors

Olfactory neurons respond to odor molecules through membrane bound GPCRs, also known as olfactory receptors. The receptors are located in the cilia of the olfactory sensory neurons and in sperm cells, where they are involved in chemotaxis. The binding of an odorant causes the receptor to undergo structural changes, the first step in a signaling cascade that ultimately ends with depolarization of the receptor neuron and transmission of an action potential. There are approximately 1,000 odor receptors in the mammalian genome, which equates to about 3% of all genes.

OR2A4 Antibody NLS3903



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human islet of langerhans using NLS3903.

Prostate-Specific GPCR Antibody NLS6332



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human prostate epithelium using NLS6332.

OR2H3 Antibody NLS4840



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human pituitary gland using NLS4840.

OR16 Antibody NLS3157



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human kidney using NLS3157.

Catalog#	Product	Host	Туре	Application	Species
NLS3157	OR16	Rabbit	Polyclonal	IHC-P	Hu
NLS3159	OR16	Rabbit	Polyclonal	IHC-P	Hu, Mu, Rt
NLS4541	OR10R2	Rabbit	Polyclonal	IHC-P	Hu
NLS4554	OR10R2	Rabbit	Polyclonal	IHC-P	Hu
NB100-91258	OR2A42	Rabbit	Polyclonal	IHC, WB	Hu
NLS3903	OR2A4	Rabbit	Polyclonal	IHC-P	Hu
NLS3901	OR2A4	Rabbit	Polyclonal	IHC-P	Hu
NLS4408	OR2H2	Rabbit	Polyclonal	IHC-P	Hu
NLS4840	OR2H3	Rabbit	Polyclonal	IHC-P	Hu
NB110-75124	OR51E1	Rabbit	Polyclonal	IHC, WB	Hu
NLS2144	OR51E1	Rabbit	Polyclonal	IHC-P	Hu
NLS2146	OR51E1	Rabbit	Polyclonal	IHC-P	Hu
NLS6332	Prostate-specific GPCR	Rabbit	Polyclonal	IHC-P	Hu
H00389090-B01	OR6B2	Mouse	Polyclonal	ELISA, IF, WB	Hu
NLS3227	OR6N1	Rabbit	Polyclonal	IHC-P	Hu
NLS4355	OR8G2	Rabbit	Polyclonal	IHC-P	Hu
NB110-75118	OR11H4	Rabbit	Polyclonal	IHC, WB	Hu
NB110-75119	OR11-33	Rabbit	Polyclonal	IHC, WB	Hu
NB110-75122	OR56A4	Rabbit	Polyclonal	IHC, WB	Hu
NB110-75124	OR51E1	Rabbit	Polyclonal	IHC, WB	Hu
NB110-75125	OR1B1	Rabbit	Polyclonal	IHC, WB	Hu
NB110-75126	OR1C1	Rabbit	Polyclonal	IHC, WB	Hu
NB100-91236	OR1M1	Rabbit	Polyclonal	IHC, WB	Hu
NB100-91238	OR1Q1	Rabbit	Polyclonal	IHC, WB	Hu

Vasopressin Receptors

Vasopressin, also known as arginine vasopressin (AVP) or antidiuretic hormone (ADH), is a peptide hormone responsible for regulating the body's retention of water, as well as a variety of neurological effects. There are three subtypes of vasopressin receptors, designated V1a, V1b and V2. The V1a and V1b receptors trigger signaling pathways via phospholipase C and they are responsible for vasoconstriction and regulation of corticotropin. The V2 receptors trigger adenylyl cylcase signaling pathways and are responsible for water reabsorption in the renal collecting duct.

V1b Receptor Antibody NLS3739



Immunohistochemical analysis of ACTH (brown) and brain and pituitary (red) using NLS3739.

Catalog#	Product	Host	Туре	Application	Species
NBP1-00157	V1a Receptor	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt, Ca
H00000552-B01P	V1a Receptor	Mouse	Polyclonal	ELISA, WB	Ни
NLS266	V1b Receptor	Rabbit	Polyclonal	ICC, IHC-P	Hu
NLS3739	V1b Receptor	Rabbit	Polyclonal	IHC-P	Нυ
NB100-96917	V1b Receptor	Goat	Polyclonal	ELISA, WB	Ни
NB100-96918	V2 Receptor	Goat	Polyclonal	ELISA, WB	Нυ
NLS273	V2 Receptor	Rabbit	Polyclonal	IHC-P	Ни

GPR30

Species: Hu Applications: IHC-P

The binding of estrogen to membrane receptor GPR30 results in the mobilization of intracellular calcium, the synthesis of phosphatidylinositol (3,4,5)-triphosphate, and the release of epidermal growth factor (EGF)-related ligands. Overexpression of GPR30 may play a role in breast cancer tumorigenesis.

Immuno-

analysis

histochemical

of human liver

using NLS1184.

GPR30 Antibody NLS1183

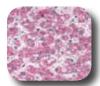


Species: Hu

Applications: IHC

Immunohistochemical analysis of human breast carcinoma using NLS1183.

GPR30 Antibody NLS1184



Species: Hu Applications: IHC

GPR30 Antibody NLS4272



histochemical analysis of human breast carcinoma using NLS4272.

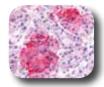
Immuno-

Species: Hu, Mu Applications: IHC-P

Somatostatin Receptors

Somatostatin is a peptide hormone that interacts with G-protein coupled somatostatin receptors. It functions in regulation of the endocrine system, neurotransmission and cell proliferation. Somatostatin acts as an inhibitory hormone; it inhibits the release of growth hormone and thyroid stimulating hormone within the anterior pituitary and suppresses the release of gastrointestinal hormones within the digestive system. Somatostatin receptors are commonly expressed in a wide array of human tumors.

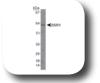
Somatostatin Receptor 1 Antibody NLS994



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human islets of langerhans using NLS994.

Somatostatin Receptor 1 Antibody NB300-120



Species: Hu, Mu, Rt Applications: IP, WB

Western blot analysis of SSR1 on rat pancreas using NB300-120.

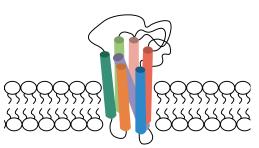
Novus also carries antibodies to the following Rhodopsin-like GPCRs:

Adrenomedullin receptors, Apelin receptors, Luteinizing Hormone receptors, Interleukin 8 receptors, Melatonin receptors, Opioid receptors, Encephalopsin receptors, Orexin receptors, Oxytocin receptors, Prokineticin receptors, Prolactin Releasing Hormone receptors, Thrombin receptors, Thyrotropin-Releasing Hormone receptors, Trace Amine receptors, Urotensin-II receptors, Vomeronasal 1 receptors

Orphan GPCRs: GPR (1, 3, 4, 6, 12, 15, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27, 31, 32, 33, 34, 35, 37, 39, 42, 44, 45, 50, 52, 55, 61, 62, 63, 65, 68, 75, 77, 78, 82, 83, 84, 85, 87, 88, 92, 101, 103, 109A, 109B, 119, 120, 132, 135, 137B, 139, 141, 142, 146, 148, 149, 150, 151, 152, 153, 160, 161, 162, 171, 173, 174, 176, 177, 182)

Secretin Receptor Family

The class B GPCR family consists of receptors that are structurally similar to those of the rhodopsin family. Secretin receptors can be identified by their large N-terminal domains, which contain six cysteine residues, confer the ability to form disulphide bonds and are highly involved in ligand binding. As for most GPCRs, the transmembrane domain of secretin receptors is a major component of the ligand binding pocket. They are activated by large peptides, such as hormones and neuropeptides. Three distinct subfamilies (dubbed B1 through B3) have been identified.

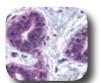


CELSR Receptors

Cadherin EGF LAG (CELSR) proteins are members of the flamingo subfamily, which is a part of the cadherin superfamily. The flamingo subfamily is made up of non-classic type cadherins, a subpopulation of cadherins that do not interact with catenins. Located on the plasma membrane, flamingo cadherins have nine cadherin domains and seven EGF-like repeats. These receptors are involved in contact-mediated communication; cadherin domains act as hemophilic binding regions while EGF-like domains are involved in cell adhesion and ligand binding. High expression levels have been reported in the brain and testis of developing mouse embryos.

Catalog#	Product	Host	Туре	Application	Species
NLS5575	CELSR1	Rabbit	Polyclonal	IHC-P	Hu
NLS5624	CELSR1	Rabbit	Polyclonal	IHC-P	Hu
NLS5364	CELSR1	Rabbit	Polyclonal	IHC-P	Hu
NLS1940	CELSR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS1942	CELSR2	Rabbit	Polyclonal	IHC-P	Hu
NLS1939	CELSR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS1943	CELSR2	Rabbit	Polyclonal	IHC-P	Hu, Mu, Rt
NLS2736	CELSR3	Rabbit	Polyclonal	IHC-P	Hu
NLS1947	CELSR3	Rabbit	Polyclonal	IHC-P	Нυ
NLS2734	CELSR3	Rabbit	Polyclonal	IHC-P	Hυ
NLS2735	CELSR3	Rabbit	Polyclonal	IHC-P	Hυ
NLS2744	CELSR3	Rabbit	Polyclonal	IHC-P	Нυ
H00001952-M01	CELSR3 (2F7)	Mouse	Monoclonal	ELISA, WB	Ηυ

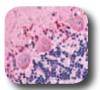
CELSR2 Antibody NLS1940



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human breast (lobular epithelium) using NLS1940.

CELSR3 Antibody NLS2734



Species: Hu Applications: IHC

Immunohistochemical analysis of human brain (purkinje neurons) using NLS2734.

Calcitonin Receptors

Calcitonin receptors are involved in cellular calcium homeostatsis and are particularly important for bone formation and metabolism. In addition to binding calcitonin, calcitonin receptors can also interact with receptor activity-modifying proteins (RAMPs) to form amylin-binding complexes, which regulate pancreatic islet function and have been implicated in type 2 diabetes. When co-expressed with RAMP1, calcitonin receptor-like receptor (CRLR) acts as a receptor for calcitonin gene-related peptide. When co-expressed with RAMP3, it acts as a receptor for adrenomedullin. Expression of calcitonin receptors has been identified in artery, blood, bone, brain, kidney, lung, placenta, prostate, skeletal muscle and thyroid tissue.

Calcitonin Receptor Antibody NLS766



Immunohistochemical analysis of human parathyroid gland using NLS766.

Species: Hu Applications: IHC-P

Calcitonin Receptor Antibody H00000799-B01



Immunofluorescent staining on 293 cell using H00000799-B01.

Applications: ELISA, IF, WB

Calcitonin Receptor Antibody NLS6755



Immunohistochemical analysis of human arterial smooth muscle using NLS6755.

Species: Hu Applications: IHC-P

Corticotropin-Releasing Hormone Receptors

Corticotropin-releasing hormone binds to corticoptropin-releasing hormone receptor (CRHR), an important mediator of the endocrine, autonomic, behavioral, and immunological responses to stress. There are two different receptors in this family, designated CRHR1 and CRHR2. Expression of these receptors has been identified in several regions of the brain, as well as in the placenta, umbilical vein, heart, epididymis, gastrointestinal tract, and skeletal muscle.

Catalog#	Product	Host	Туре	Application	Species
NB100-57078	CRHR1	Goat	Polyclonal	ELISA, IF, IHC-P, WB	Mu, Ca, Hu, Rt, Sh
NBP1-00175	CRHR1	Goat	Polyclonal	ELISA, IF, WB	Hu, Mu, Rt
NLS1778	CRHR1	Rabbit	Polyclonal	IHC	Hu, Rt
NB100-57078	CRHR1	Goat	Polyclonal	ELISA, IF, WB, IHC-P	Ca, Hu, Mu, Rt, Sh
NB100-78597	CRHR2	Rabbit	Polyclonal	WB	Hυ
NB100-78598	CHRH2	Rabbit	Polyclonal	WB	Нυ
NB100-56485	CRHR2	Rabbit	Polyclonal	IHC-P	Bv, Ch, Ca, Hu, Mu, Rt, Mk
NLS502	CRHR2	Rabbit	Polyclonal	IHC-P	Hu
NLS3570	CRHR2	Rabbit	Polyclonal	IHC, IF, WB	Hu, Rt
NLS4364	CRHR2	Rabbit	Polyclonal	IHC-P	Нυ
NLS505	CRHR2	Rabbit	Polyclonal	IHC-P	Hυ
H00001395-B01	CRHR2	Mouse	Polyclonal	ELISA, WB	Hu

CRHR1 Antibody NBP1-02328



Species: Hu Applications: IHC

Immunohistochemical analysis of human pars intermedia using NBP1-02328.

CRHR2 Antibody NLS3573



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human brain (choroid plexus) using NLS3573.

Glucagon Receptors

Glucagon receptors mediate the physiologic effects of glucagon. These receptors are mainly expressed in the liver and kidney and, to a lesser extent, in the heart, adipose tissue, spleen, thymus, adrenal glands, pancreas, cerebral cortex, and gastrointestinal tract. Glucagon-like peptide 1 receptor (GLP1R) has been shown to have an effect on feelings of satiety, control of glucagon sensitivity of islets, and non insulin-dependent diabetes mellitus. Stimulation of the receptor by endogenous hormone induces several mechanisms which act together to lower levels of circulating blood glucose. Expression of glucagon-like peptide 2 receptor (GLP2R) is limited to subsets of enteric nerves and enteroendocrine cells of the stomach and intestines. Activation of GLP2R initiates a signaling cascade that promotes expansion of the mucosal epithelium via activation of growth and anti-apoptotic pathways which acts to prevent intestinal hypoplasia.

GLP1R Antibody NB100-91782



Western blot analysis in extracts from COS7 cells uisng NB100-91782.

Species: Hu, Mu, Rt Applications: ELISA, IF, WB

GLP1R Antibody NLS1205



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human islets of langerhans using NLS1205.

GLP2R Antibody NLS1312



Immunohistochemical analysis of human colon (muscularis propria) using NI \$1312

Species: Hu Applications: IHC-P

Latrophilin Receptors

Latrophilin receptors are brain-specific, calcium-independent orphan GPCRs of the secretin family. All three isoforms share homology with lectin and olfactomedin, and possess common transmembrane domains, variable C-termini and various alternative-splicing sites. Latrophilin-1 and latrophilin-2 bind alpha-latrotoxin, a potent pre-synaptic neurotoxin present in the venom of black widow spiders. Latrophilin-3 binds an unknown ligand.

Latrophilin-1 Antibody NLS1126



Immunohistochemical analysis of human brain using NLS1126.

Species: Hu Applications: IHC-P

Latrophilin-2 Antibody NLS1132



Immunohistochemical analysis of human ovary using NLS1132.

Species: Hu Applications: IHC-P

Latrophilin-3 Antibody NLS1138



Immunohistochemical analysis of human brain (neurons and glia) using NLS1138.

Species: Hu Applications: IHC-P

Brain-Specific Angiogenesis Inhibitors

Brain-specific angiogenesis inhibitors (BAIs) are orphan GPCRs with unknown ligands. There are three BAI genes, designated BAI1 through BAI3, which have similar tissue specificities and structures. BAI expression has been reported primarily in the brain, but also in the heart, skeletal muscle, thymus, ovary, and testis. BAI1 expression is downregulated during tumor formation. Decreased expression of BAI2 has been associated with formation of new blood vessels in a murine model.

Catalog#	Product	Host	Туре	Application	Species
NB110-81586	BAI1	Rabbit	Polyclonal	IHC-P	Hu, Mu
NLS989	BAI1	Rabbit	Polyclonal	IHC-P	Ηυ
NBP1-00723	BAI1	Rabbit	Polyclonal	ELISA, IHC, WB	Hu, Mu
NLS991	BAI1	Rabbit	Polyclonal	IHC-P	Ηυ
NLS981	BAI2	Rabbit	Polyclonal	WB, ICC, IHC-P	Ηυ
NLS982	BAI2	Rabbit	Polyclonal	IHC-P	Hυ
NLS984	BAI2	Rabbit	Polyclonal	IHC-P	Hυ
NLS978	BAI3	Rabbit	Polyclonal	IHC-P	Ηυ
NLS979	BAI3	Rabbit	Polyclonal	IHC-P	Ηυ

BAI1 Antibody NB110-81586



Immuno-

histochemical

mouse brain using

NB110-81586.

analysis of

Species: Hu, Mu Applications: IHC-P

BAI2 Antibody NLS981



Immunohistochemical analysis of human skeletal muscle using NLS981.

Species: Hu Applications: WB, ICC, IHC-P

EGF-Like Module-Containing Mucin-Like Receptor

EMR1/2/3s are characterized as orphan GPCRs with unknown ligands. The N-terminus of EMR1 has six EGF-like modules, separated from the transmembrane segments by a serine/threonine-rich domain. EMR1 expression has been identified in human peripheral blood mononuclear cells, monocytes, and hematopoietic and solid tumorderived cell lines. EMR2 has five EGF-like domains and is highly homologous to CD97. It is expressed in immune tissues, restricted specifically to monocytes and granulocytes. EMR3 is expressed in neutrophils, monocytes and macrophages, and may play a role in myeloid interactions during immune and inflammatory responses.

EMR1 Antibody NBP1-00801



analysis of EMR1 in extracts from Jurkat cells using NBP1-00801.

Western blot

Applications: ELISA, WB

EMR2 Antibody NLS6381



Species: Hu Applications: IHC-P Immunohistochemical analysis of human lung pneumonia, neutrophils using NLS6381.

NBP1-00801 EMR1 Rabbit Polyclonal ELISA, WB Hu NLS2675 EMR1 Rabbit Polyclonal IHC-P Hu NB100-77699 EMR1 Rabbit Polyclonal FACS, WB, IHC-Fr Mu H00002015-B01P EMR1 Rat Monoclonal ELISA, WB Hu NLS6319 EMR2 Rabbit Polyclonal IHC-P Hu NLS6381 EMR2 Rabbit Polyclonal IHC-P Hu NBP1-02661 EMR2 Rabbit Polyclonal IHC-P Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu NB100-65935 EMR3 (3D7) Hamster Monoclonal FACS, IP Hu	Catalog#	Product	Host	Туре	Application	Species
NB100-77699 EMR1 Rabbit Polyclonal FACS, WB, IHC-Fr Mu H00002015-B01P EMR1 Rat Monoclonal ELISA, WB Hu NLS6319 EMR2 Rabbit Polyclonal IHC-P Hu NLS6381 EMR2 Rabbit Polyclonal IHC-P Hu NBP1-02661 EMR2 Rabbit Polyclonal IHC-P Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	NBP1-00801	EMR1	Rabbit	Polyclonal	ELISA, WB	Hu
H00002015-B01P EMR1 Rat Monoclonal ELISA, WB Hu NLS6319 EMR2 Rabbit Polyclonal IHC-P Hu NLS6381 EMR2 Rabbit Polyclonal IHC-P Hu NBP1-02661 EMR2 Rabbit Polyclonal IHC Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	NLS2675	EMR1	Rabbit	Polyclonal	IHC-P	Hu
NLS6319 EMR2 Robbit Polyclonal IHC-P Hu NLS6381 EMR2 Rabbit Polyclonal IHC-P Hu NBP1-02661 EMR2 Rabbit Polyclonal IHC Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	NB100-77699	EMR1	Rabbit	Polyclonal	FACS, WB, IHC-Fr	Mu
NLS6381 EMR2 Rabbit Polyclonal IHC-P Hu NBP1-02661 EMR2 Rabbit Polyclonal IHC Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	H00002015-B01P	EMR1	Rat	Monoclonal	ELISA, WB	Hu
NBP1-02661 EMR2 Rabbit Polyclonal IHC Hu NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	NLS6319	EMR2	Rabbit	Polyclonal	IHC-P	Hu
NLS6609 EMR3 Rabbit Polyclonal IHC-P Hu	NLS6381	EMR2	Rabbit	Polyclonal	IHC-P	Hυ
	NBP1-02661	EMR2	Rabbit	Polyclonal	IHC	Hu
NB100-65935 EMR3 (3D7) Hamster Monoclonal FACS, IP Hu	NLS6609	EMR3	Rabbit	Polyclonal	IHC-P	Hu
	NB100-65935	EMR3 (3D7)	Hamster	Monoclonal	FACS, IP	Hu

Vasoactive Intestinal Polypeptide Receptors

Vasoactive intestinal peptide (VIP) plays the role of neurotransmitter, hormone and cytokine in the nervous, endocrine and immune systems. VIP and its receptors, VIPR1 and VIPR2, modulate diverse T cell functions in the immune system. VIPR1 is the predominant receptor subtype for VIP in cancers and has recently been shown to be a potent facilitator of HIV-1 infection. VIPR2 has been shown to affect the rhythm of the circadian clock. Both receptor subtypes are expressed in a wide array of tissues.

Catalog#	Product	Host	Туре	Application	Species
NB100-74566	VIPR1	Rabbit	Polyclonal	WB, ICC, IHC-P	Hu
NLS946	VIPR1	Rabbit	Polyclonal	IHC-P	Hu
NLS1296	VIPR1	Rabbit	Polyclonal	IHC-P	Hu
NLS1298	VIPR1	Rabbit	Polyclonal	IHC-P	Hυ
NLS1297	VIPR1	Rabbit	Polyclonal	IHC-P	Hu
NB100-58986	VIPR1	Rabbit	Polyclonal	IHC-P	Hu
H00007433-B01	VIPR1	Mouse	Polyclonal	ELISA, WB	Hu
NB120-16155	VIPR1 (AS58)	Mouse	Monoclonal	FACS, IHC, WB	Hu, Rt
NB120-16156	VIPR2 (AS69)	Mouse	Monoclonal	WB, IHC-P	Hu, Rt
NB100-74567	VIPR2	Rabbit	Polyclonal	WB, ICC, IHC-P	Hu

VIPR1 Antibody NLS1297



Immuno-

human

histochemical analysis of

adipocytes using NLS1297.

Species: Hu Applications: IHC-P

VIPR2 Antibody NB100-74567



histochemical analysis of of human small intestine using NB100-74567.

Immuno-

Applications: WB, ICC, IHC-P

GHRH Receptor Antibody NB100-74424



Immunohistochemical analysis of GHRHR in human ovarian carcinoma using NB100-74424.

Applications: WB, ICC, IHC-P

GHRH Receptors

Growth hormone releasing hormone receptor (GHRHR), stimulates growth hormone (GH) secretion and synthesis in the pituitary gland. Mutations in GHRHR can cause either GH deficiency, resulting in dwarfism, or excessive production of GH, leading to gigantism. Four tissue-specific splice variants have been isolated. GHRHR is primarily expressed in the brain.

Parathyroid Hormone Receptors

Parathyroid hormone receptors (PTHRs) bind parathyroid hormone (PTH), parathyroid hormone-related peptide (PTHRP), and tuberoinfundibular peptide 39. PTHR1 mediates PTH-dependent regulation of mineral-ion homeostasis. Mutations in this receptor are responsible for disorders of calcium and bone metabolism. The physiological role of PTHR2 is undetermined. While PTHR1 is expressed in bone, breast, brain, colon, gastrointestinal tract, kidney, liver, placenta, skin, umbilical cord and uterus, PTHR2 has only been identified in the brain. Due to PTHR2s neuronal localization, it is thought to function as a neurotransmitter receptor.

PTHR1 Antibody NLS761



Applications: IHC-P Immunohistochemical analysis of human kidney (collecting ducts of the cortex) using NLS761.

PTHR2 Antibody NLS250



Applications: IHC-P Immunohistochemical analysis of human brain (neurons and glia) using NLS250.

CD97 Antibody NLS2652



Immunohistochemical analysis of human alveolar macrophages using NLS2652.

Species: Hu
Applications: ICC, IHC-P

Leukocyte Antigen CD97

CD97 is a leukocyte antigen that is highly homologous to EMR2. CD97 is involved in cell signaling and cell adhesion. It is associated with activated lesions of multiple sclerosis and has been implicated in the anaplasia of colon and thyroid tumors. CD97 is expressed abundantly in hematopoietic cells and is up-regulated in activated B and T cells.

Gastric Inhibitory Polypeptide Receptors

Gastric inhibitory polypeptide receptor (GIPR) mediates GIP-induced secretion of insulin by pancreatic islet beta cells after a meal. Stimulation of GIPR on pancreatic cells activates adenlyl cyclase and mitogen-activated protein kinase, resulting in increased insulin secretion. GIPR defects may contribute to the pathogenesis of diabetes and obesity. Expression has been identified in human bone, fetal adrenal glands, and the pancreas.

GIPR Antibody NLS1253



histochemical analysis of human adrenal pheochromocytoma using NLS1253.

Immuno-

Applications: IHC-P

Abnova, Acris, biosensis, Innova

Novus distributes for these companies:





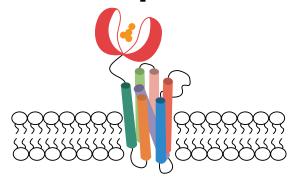




Innova Biosciences

Metabotropic Glutamate Receptor Family

Class C GPCRs are distinguished by a large, extracellular, N-terminal domain that binds endogenous ligands. The extracellular domain has a clamshell-like morphology and is known as a Venus flytrap module (VFTM). The VFTMs are structurally similar to bacterial periplasmic amino acid-binding proteins (PBPs). Class C GPCRs have been implicated in the physiology of various types of epilepsy, as well as nociception and drug addiction.



Calcium-Sensing Receptors

Calcium-sensing receptors (CaSRs) sense extracellular levels of calcium ions. The binding of calcium induces a conformational change in the receptor and triggers the phospholipase C pathway, ultimately increasing the intracellular concentration of calcium. In the parathyroid gland, CaSRs control calcium homeostasis by regulating the release of parathyroid hormone.

Catalog#	Product	Host	Туре	Application	Species
NB100-1830	CaSR (HL 1499)	Mouse	Monoclonal	WB	Hu, Mu, Rt, Rb
NBP1-19452	CaSR	Rabbit	Polyclonal	IHC, WB	Hu, Mu, Rt
NLS1425	CaSR	Rabbit	Polyclonal	IHC-P	Ни
NLS1427	CaSR	Rabbit	Polyclonal	IHC-P	Нυ
H00000846-M01	CaSR (3F12)	Mouse	Monoclonal	ELISA, WB	Ни
NB120-19347	CaSR (5C10, ADD)	Mouse	Monoclonal	IHC, WB	Bv, Hu, Rt
NB100-74378	CaSR (6D4-3F4-6C4)	Mouse	Monoclonal	WB	Rt, Hu
NB100-74379	CaSR (5C10, ADD)	Mouse	Monoclonal	ELISA, IF, WB, IHC-Fr	Rt, Hu, Bv
NB100-74380	CaSR	Rabbit	Polyclonal	WB	Rt, Hu
NBP1-04725	CaSR	Rabbit	Polyclonal	ELISA	Нυ

CaSR (HL 1499) Antibody NB100-1830



Species: Hu, Mu, Rt, Rb Applications: WB

Western blot analysis in transfected 293 cell lysate using NB100-1830.

CaSR Antibody NLS1425



Species: Hu Applications:IHC-P

Immunohistochemical analysis of human parathyroid using NBP1-19452.

GABA-B Receptors

GABA-B receptors are receptors for gamma-aminobutyric acid (GABA) that are linked to potassium channels via G-proteins. GABA-B receptors are inhibitory receptors found in the central and peripheral autonomic nervous systems. Ligand binding triggers a signaling cascade that stimulates the opening of potassium channels, hyperpolarizing the neuron. This prevents sodium channels from opening and action potentials from firing, thus ultimately inhibiting neurotransmitter release. GABA-B receptors may play important roles in the development and sensation of pain.

GABA-BR1 Antibody NLS5270



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human brain lysate using NLS5270.

GABA-BR2 Antibody NB300-159



Species: Hu Applications: WB

Western blot analysis of GABA BR2 in brain lysate using NB300-159.

Catalog#	Product	Host	Туре	Application	Species
NB100-61102	GABA-BR1	Rabbit	Polyclonal	WB	Rt
NB300-160	GABA-BR1	Rabbit	Polyclonal	WB	Ни
NBP1-00839	GABA-BR1	Rabbit	Polyclonal	ELISA, IHC, WB	Hu, Mu, Rt
NBP1-19356	GABA-BR1	Rabbit	Polyclonal	IHC, WB	Hu, Mu, Rt
NLS5270	GABA-BR1	Rabbit	Polyclonal	IHC-P	Ни
NLS5332	GABA-BR1	Rabbit	Polyclonal	IHC-P	Ни
NB100-66176	GABA-BR1	Rabbit	Polyclonal	WB	Bv, Hu, Mu, Mk, Rt
NBP1-04966	GABA-BR1	Rabbit	Polyclonal	WB	Hu, Mu, Rt
H00002550-M01	GABA-BR1 (2D7)	Mouse	Monoclonal	ELISA, IF, WB	Ни
NB300-170	GABA-BR2	Rabbit	Polyclonal	IHC, IF, WB	Hu, Mu, Rt
NB100-61101	GABA-BR2	Rabbit	Polyclonal	IF, WB	Rt
NB300-159	GABA-BR2	Rabbit	Polyclonal	WB	Ни
NB100-79951	GABA-BR2 (EP2411Y)	Rabbit	Monoclonal	FACS, IHC, WB, ICC	Hu, Mu, Rt
NB100-66548	GABA-BR2	Rabbit	Polyclonal	IF, WB	Bv, Ch, Hu, Mu, Mk, Rt, Xp

Taste Receptors

The perception of taste is mediated by receptors located on the surface of the tongue, along the soft palate, and on the epithelium of the pharynx and epiglottis. The receptors for sour and salty are ion channels, while the receptors for sweet, bitter and umami are GPCRs. Each sweet receptor contains two subunits (T1R2 and T1R3), which are coupled to G-proteins. There are 25 bitter receptors (T2Rs) encoded by the human genome.

Catalog#	Product	Host	Туре	Application	Species
NBP1-20210	TAS1R1	Rabbit	Polyclonal	IHC, WB	Rt
NB100-94889	TAS1R3	Goat	Polyclonal	ELISA	Нυ
NB110-74888	TAS2R1	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74889	TAS2R3	Rabbit	Polyclonal	IHC, WB	Hu
NB110-74890	TAS2R4	Rabbit	Polyclonal	IHC, WB	Ηυ
NB110-74891	TAS2R5	Rabbit	Polyclonal	IHC, WB	Нυ
NBP1-20217	TAS2R7	Rabbit	Polyclonal	IHC, WB	Mu, Rt
NB110-74893	TAS2R8	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74894	TAS2R9	Rabbit	Polyclonal	IHC, WB	Hu
H00050839-M10	TAS2R10 (4C10)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-74896	TAS2R12	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74897	TAS2R13	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74898	TAS2R14	Rabbit	Polyclonal	IHC, WB	Нυ
NBP1-20215	TAS2R16	Rabbit	Polyclonal	IHC, WB	Rt
NB110-74900	TAS2R38	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74901	TAS2R40	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74902	TAS2R41	Rabbit	Polyclonal	IHC, WB	Ηυ
NB110-74903	TAS2R42	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74904	TAS2R43	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74905	TAS2R44	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74910	TAS2R46	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74911	TAS2R47	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74913	TAS2R48	Rabbit	Polyclonal	IHC, WB	Нυ
H00259295-B01	TAS2R49	Mouse	Polyclonal	ELISA, WB	Нυ
NB110-74914	TAS2R50	Rabbit	Polyclonal	IHC, WB	Нυ
NB110-74915	TAS2R60	Rabbit	Polyclonal	IHC, WB	Hu

TAS1R1 Antibody NLS1994



Species: Hu Applications: IHC-P

Immunohistochemical analysis of human testis using NLS1994.

TAS1R3 Antibody NLS5060



Species: Hu
Applications: IHC-P

Immunohistochemical analysis of human taste receptors using NI \$5060

TAS1R2 Antibody NB100-93440



Species: Hu Applications: ELISA, WB

Western blot analysis of human pancreas lysate using NB100-93440.

TAS1R3 Antibody NLS5073



Species: Hu
Applications: IHC-P

Immunohistochemical analysis of human taste receptors using NLS5073.

Retinoic Acid-Inducible Receptors

Retinoic acid-inducible (RAIG) receptors act as receptors for retinoic acid, the oxidized form of vitamin A. RAIG receptors interact with Frizzled receptors and play a role in activating the Wnt signaling pathway. There are four different types of RAIG receptors, designated GPRC5A through GPRC5D.

GPCR5A/RAIG1 Antibody NBP1-01000



Western blot analysis in extracts from LOVO cells using NBP1-01000.

Species: Hu, Mu, Rt Applications: ELISA, WB

GPRC5A/RAIG1 Antibody NLS1221



Immunohistochemical analysis of human breast using NLS1221.

Species: Hu Applications: ICC, IHC-P

Catalog#	Product	Host	Туре	Application	Species
NBP1-19001	GPRC5A/RAIG1	Rabbit	Polyclonal	IHC, WB	Hu
NLS3551	GPRC5A/RAIG1	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Нυ
NBP1-01000	GPRC5A/RAIG1	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NLS1221	GPRC5A/RAIG1	Rabbit	Polyclonal	IHC-P	Hu
NLS1222	GPRC5A/RAIG1	Rabbit	Polyclonal	IHC-P	Hu
NLS3552	GPRC5A/RAIG1	Rabbit	Polyclonal	IHC-P	Hu
NLS1220	GPRC5A/RAIG1	Rabbit	Polyclonal	ICC, IHC-P	Hu
H00009052-B01	GPRC5A/RAIG1	Mouse	Polyclonal	ELISA, WB	Hu
NLS4084	GPRC5B/RAIG2	Rabbit	Polyclonal	IHC-P	Hu, Mu
NLS412	GPRC5B/RAIG2	Rabbit	Polyclonal	IHC-P	Hu
NLS413	GPRC5B/RAIG2	Rabbit	Polyclonal	IHC-P	Hu, Mu
NB100-58991	GPRC5B/RAIG2	Rabbit	Polyclonal	IHC-P	Hu, Mu
NBP1-02378	GPRC5B/RAIG2	Rabbit	Polyclonal	IHC	Нυ
NLS4079	GPRC5C/RAIG3	Rabbit	Polyclonal	IHC	Hu
NLS4075	GPRC5C/RAIG3	Rabbit	Polyclonal	IHC-P	Hu
NBP1-02395	GPRC5C/RAIG3	Rabbit	Polyclonal	IHC	Hu
NBP1-02405	GPRC5C/RAIG3	Rabbit	Polyclonal	IHC	Ηυ
H00055890-B01	GPRC5C/RAIG3	Mouse	Polyclonal	ELISA, IF	Hu

Frizzled/Smoothened Receptor Family

As a key regulator of polarity and cell proliferation, the Frizzled protein is critically involved in embryogenesis. There is substantial evidence that Frizzled receptors also regulate tissue homeostasis in an array of adult tissues and organs. Frizzled proteins act as receptors in the Wnt signaling pathway. Upon ligand binding, Frizzled leads to activation of Disheveled proteins in the cytosol.

Catalog#	Product	Host	Туре	Application	Species
NLS4150	FZD1	Rabbit	Polyclonal	IHC-P	Hu
NBP1-00824	FZD1	Rabbit	Polyclonal	ELISA, WB	Ηυ
NLS3488	FZD2	Rabbit	Polyclonal	IHC-P	Hu, Mu
NBP1-20920	FZD2	Goat	Polyclonal	PEP-ELISA	Hu, Mu, Rt
NBP1-00827	FZD2	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
H00002535-M05	FZD2 (1E7)	Mouse	Monoclonal	ELISA	Hu
NLS4437	FZD3	Rabbit	Polyclonal	IHC-P	Нυ
NLS4454	FZD3	Rabbit	Polyclonal	IHC-P	Нυ
NB100-93450	FZD3	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NBP1-00828	FZD3	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NBP1-00829	FZD3	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
H00007976-M02	FZD3 (1B8)	Mouse	Monoclonal	ELISA, WB	Hυ
NLS4911	FZD4	Rabbit	Polyclonal	IHC-P	Нυ
NB110-59995	FZD4 (CH3A4A7)	Mouse	Monoclonal	FACS	Нυ
H00008322-M02	FZD4 (3G7)	Mouse	Monoclonal	ELISA, WB	Hυ
NLS4273	FZD5	Rabbit	Polyclonal	IHC-P	Нυ
NLS4284	FZD5	Rabbit	Polyclonal	IHC-P	Нυ
NBP1-00831	FZD5/8	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
NLS4482	FZD6	Rabbit	Polyclonal	IHC-P, IHC-Fr, ICC	Нυ
NLS4481	FZD6	Rabbit	Polyclonal	IP, ICC	Нυ
NLS4900	FZD7	Rabbit	Polyclonal	IHC-P	Нυ
NB100-93398	FZD7	Goat	Polyclonal	ELISA, WB	Hu, Mu
NBP1-00832	FZD7	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NLS4766	FZD8	Rabbit	Polyclonal	IHC-P	Нυ
NLS4776	FZD8	Rabbit	Polyclonal	IHC-P	Ηυ
NBP1-00833	FZD8	Rabbit	Polyclonal	ELISA, WB	Hu, Mu, Rt
H00008325-A01	FZD8	Mouse	Polyclonal	ELISA, WB	Нυ
NLS5103	FZD9	Rabbit	Polyclonal	ICC, IHC-P, IHC-Fr	Hu, Mu
NB100-59000	FZD9	Rabbit	Polyclonal	IHC-P	Hu, Rt, Mu
NB100-94906	FZD9	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NBP1-00834	FZD9	Rabbit	Polyclonal	ELISA, WB	Hu, Mu
NLS5118	FZD9	Rabbit	Polyclonal	IHC-P	Нυ
NBP1-00826	FZD10	Rabbit	Polyclonal	ELISA, WB	Hu, Mu

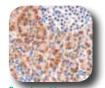
FZD4 Antibody NB110-59995



Species: Hu Applications: FACS

Flow cytometric analysis of human cervical carcinoma cell line HeLa stained using NB110-59995.

FZD8 Antibody NB100-2439



Immunohistochemical analysis of human pancreas using NB100-2439.

Applications: WB, IHC-P, PEP-ELISA

FZD10 Antibody NLS4400



Applications: IHC-P

Immunohistochemical analysis of human kidney cortex using NLS4400.

Smoothened Receptors

The Smoothened receptor (SMO) associates with the Patched protein to mediate the cellular response to Hedgehog, which plays a critical role in controlling patterning and growth during vertebrate development. Stimulation of the Patched receptor by Hedgehog leads to the translocation of SMO to the primary cilium. SMO binds the teratogen cyclopamine as well as the kinesin motor protein Costal-2. Smoothened has also been shown to function as an oncogene in basal-cell carcinomas.

SMO Antibody NLS2668



Immunohistochemical analysis of human brain neurons using NLS2668.

Species: Hu, Mu, Rt Applications: IHC, WB

SMO Antibody NB100-55397



Western blot analysis of human bone marrow lysate using NB100-53397 (lane B).

Species: Hu
Applications: ELISA, WB, PEP-ELISA

SMO Antibody NLS2666



Immunohistochemical analysis of human pancreas islet cells using NLS2666.

Species: Hu
Applications: IHC-P



IN THE NEWS

- 1. [BAIAP2L1 H00055971-M01] Vingadassalom D, Kazlauskas A, Skehan B, et al. Insulin receptor tyrosine kinase substrate links the E. coli O157:H7 actin assembly effectors Tir and EspF(u) during pedestal formation. PNAS 2009;106(16):6754-6759. [PMID: 19366662]
- [CRHR2 NB100-56485] Huang M, Kempuraj D, Papadopoulou N, et al. Urocortin induces interleukin-6 release from rat cardiomyocytes through p38 MAP kinase, ERK and NF-kappa B activation. J Mol Endocrinol. 2009;42(5):397-405. [PMID: 19211730]
- 3. [CXCR3 NB100-56404] Brambilla R, Persaud T, Hu X, et al. Transgenic inhibition of astroglial NF-kappa B improves functional outcome in experimental autoimmune encephalomyelitis by suppressing chronic central nervous system inflammation. J Immunol 2009;182(5):2628-2640. [PMID: 19234157]
- [CXCR5 NB100-56333] Kim MJ, Romero R, Kim CJ, et al. Villitis of unknown etiology is associated with a distinct pattern of chemokine up-regulation in the feto-maternal and placental compartments: implications for conjoint maternal allograft rejection and maternal anti-fetal graft-versus-host disease. J Immunol 2009;182(6):3919-3927. [PMID: 19265171]
- 5. [Endothelin B Receptor NLS54] Comellas AP, Briva A, Dada LA, et al. Endothelin-1 impairs aveolar epithelial function via endothelial ETB receptor. Am J Respir Crit Care Med 2009; 179(2):113-122. [PMID: 18948426]
- 6. [GIPR NLS1253] Shu L, Matveyenko AV, Kerr-Conte J, et al. Decreased TCF7L2 protein levels in type 2 diabetes mellitus correlate with downregulation of GIP- and GLP-1 receptors and impaired beta-cell function. Hum Mol Genet. 2009;18(13):2388-2399. [PMID: 19386626]
- 7. [Glucagon-like Peptide 1 Receptor NLS1205] Matveyenko AV, Dry S, Cox HI, et al. Beneficial endocrine but adverse exocrine effects of sitagliptin in the human islet amyloid polypeptide transgenic rat model of type 2 diabetes: interactions with metformin. Diabetes 2009; 58(7):1604-1615. [PMID: 19403868]
- 8. [GPR30 NLS1183] Park II, Zhang Q, Liu V, et al. 17 beta-estradiol at low concentrations acts through distinct pathways in normal versus BPH-derived prostate stromal cells. Endocrinology 2009. [PMID: 19608654]
- [GPR91 NLS2112] Vargas SL, Toma I, Kang JJ, et al. Activation of the succinate receptor GPR91 in macula densa cells causes renin release. J Am Soc Nephrol. 2009; 20(5):1002-1011.
 [PMID: 19389848]
- [Neurokinin 1 Receptor NB100-74469] Cavanaugh DJ, Lee H, Lo L, et al. Distinct subsets of unmyelinated primary sensory fibers mediate behavioral responses to noxious thermal and mechanical stimuli. PNAS. 2009;106(22):9075-9080. [PMID: 19451647]
- 11. [Pyrimidenergic Receptor P2Y4 NLS5011] Zhang Y, Nelson RD, Carlson NG, et al. Potential Role of purinergic signaling in lithium-induced nephrogenic diabetes insipidus. Am J Physiol Renal Physiol. 2009; 296(5):F1194-201. [PMID: 19244398]
- 12. [TACR1 H00006869-A01] Chernova I, Lai J-P, Li H, et al. Substance P (SP) enhances CCL5-induced chemotaxis and intracellular signaling in human monocytes, which express the truncated neurokinin-1 receptor (NK1R). J Leukoc Biol. 2009;85(1):154-164. [PMID: 18835883]

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