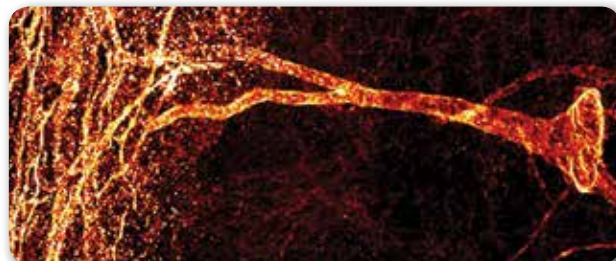


ANTIBODIES FOR NEUROTRANSMITTERS & NEURORECEPTORS

Exchange of information between neurons is executed via release of neurotransmitters at the presynaptic nerve terminals. Neurotransmitters then move across the neuronal synapses for recognition by neuroreceptors, the membrane receptor proteins which gets activated by neurotransmitters. Besides regulating vital processes such as heart-beat, breathing, digestion, sensory system etc; neurotransmitters and neuroreceptors are also responsible for several other activities ranging from sleep cycles to mood changes. A fine balance between the duo is required for optimal functioning of the nervous system and the body as a whole. Accordingly, the analysis of neurotransmitter and neuroreceptor expression is very critical for physiological as well as pathological neuroscience experiments.



Confocal staining analysis of NKR1/Substance P Receptor expression on a lamina III neuron in the spinal cord of rat model using rabbit polyclonal Neurokinin 1 Receptor antibody [NB300-101].

Novus Biologicals offers a range of high quality antibodies against various neurotransmitters (small molecules, amino acids and neuropeptides) as well as various classes of neuroreceptors. Some of our most popular antibodies to these targets are:

Serotonin Antibody (5HT-H209) **NB120-16007 (3 publications)**

Species: All species

Applications: ICC/IF, IHC-Fr, IHC-P



IHC analysis of a formalin fixed and paraffin embedded tissue section of rhesus macaque proximal colon.

GABA Antibody **NB120-17413 (5 publications)**

Species: All Species

Applications: IHC-P, IHC-Fr, ELISA

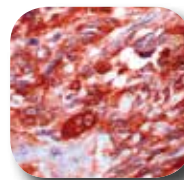


IHC analysis of a frozen section of adult mouse brain showing presence of GABA in the glial cells of cerebellar cortex.

Calcitonin Antibody (SP17) **NBP2-26483 (4 publications)**

Species: Hu, Rt, Ca

Applications: IHC-P



IHC analysis of a formalin fixed and paraffin embedded section of human thyroid medullary carcinoma.

GABA-A R beta 3 Antibody **NB300-199 (6 publications)**

Species: Hu, Mu, Rt

Applications: SW, WB, ICC/IF, IHC-Fr

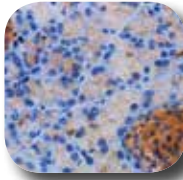


Simple Western analysis of human brain tissue lysate using a 12-230 kDa separation system.

Somatostatin Receptor 2 Antibody **NB300-157 (6 publications)**

Species: Hu, Mu, Rt

Applications: WB, Flow, ICC/IF, IHC-Fr, IHC-P, IP



IHC staining of a formalin fixed and paraffin embedded mouse pancreas tissue section.

NK1R Antibody **NB300-119 (27 publications)**

Species: Hu, Mu, Rt

Applications: WB, Flow, ICC/IF, IHC-P



WB analysis of brain tissue lysates from human (1), rat (2) and monkey (3) showing specific NK1R reactivity.

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Most Popular Antibodies to Neurotransmitters

Small Molecules

Target	Catalog	Clonality	Applications	Species
Acetylcholine	NB100-64656	Rb/Poly	IHC-Fr, ELISA	All Species
Dopamine	NB100-1878	Rb/Poly	ICC/IF, ELISA	All Species
Dopamine	NB110-2538	Mu/Mono	ICC/IF	All Species
Serotonin	NB120-16007	Mu/Mono	ICC/IF, IHC-Fr, IHC-P	All Species
Serotonin	NB100-65037	Rt/Mono	ICC/IF, IHC-Fr	All Species
Serotonin	NB100-62914	Sh/Poly	ELISA	All Species
Histamine	NBP2-45266	Rb/Poly	DB, IHC-P	All Species

Amino Acids

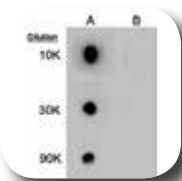
Target	Catalog	Clonality	Applications	Species
GABA	NBP2-43558	Rb/Poly	DB, IHC-Fr	All Species
GABA	NB120-17413	Gp/Poly	ELISA, IHC-P, IHC-Fr	All Species
Glycine	NB600-1511	Rb/Poly	IHC	All Species
Glutamate	NBP2-29884	Mu/Mono	IHC	All Species

Neuroactive Peptides

Target	Catalog	Clonality	Applications	Species
Bradykinin	NB100-62405	Rb/Poly	ELISA	All Species
Beta-endorphin	NB120-10339	Rb/Poly	ICC/IF, IHC-P	Hu
Beta-endorphin	NB500-414	Mu/Mono	IHC-Fr, IHC-P	Hu
Bombesin	NBP1-87587	Rb/Poly	WB, IHC-P	Hu
Calcitonin	NBP2-26483	Rb/Mono	IHC-P	Hu, Rt, Ca
Calcitonin	NBP1-30051	Mu/Mono	ICC/IF	Hu, Rt
Calcitonin	H00000796-M01	Mu/Mono	WB, ELISA	Hu
Cholecystokinin	NBP1-19789	Rb/Poly	WB, IHC-P	Hu, Mu, Rt
Cholecystokinin	NBP1-35641	Rb/Poly	WB, IHC-P	Hu
Dynorphin	NBP1-31768	Rb/Poly	WB, IHC-P	Hu
Insulin	NBP2-15195	Mu/Mono	WB, ELISA, Flow, ICC/IF, IHC-Fr, IHC-P, IP	Hu, Po, Bv
Insulin	NB100-64697	Mu/Mono	ELISA, IHC-Fr, IHC-P	Hu, Mu, Rt, Po, Bv
Insulin	NBP1-87485	Rb/Poly	WB, IHC-P	Hu
Gastrin	NBP1-67574	Rb/Poly	WB, ELISA, ICC/IF, IHC-P	Hu, Mu, Rt
Gastrin	NB110-41549	Rb/Poly	IHC-P	Hu
Substance P	NB300-187	Gp/Poly	ICC/IF, IHC-Fr	Hu, Mu, Rt
Substance P	NB100-65219	Rt/Mono	ICC/IF, IHC-Fr, IHC-P, IHC-WhMt	Hu, Mu
Neurotensin	NBP2-33903	Rb/Poly	IHC-P	Hu
Glucagon	NB100-91782	Rb/Poly	WB, ICC/IF, IHC-Fr, IHC-P	Hu, Mu, Rt, Pm
Somatostatin	NBP2-37447	Mu/Mono	WB, ELISA, Flow, IHC-P	Hu
Oxytocin	NBP1-19753	Rb/Poly	WB, ICC/IF, IHC-P	Hu, Mu, Rt
Prolactin	NBP1-36388	Rb/Poly	IHC-P	Hu
Neuropeptide Y	NBP1-46535	Gt/Poly	WB, IHC-Fr, IHC-P	Hu, Mu, Rt, Rb, Xp

GABA Antibody
NBP2-43558

Species: All species
Applications: DB, IHC-Fr



Dot Blot analysis of 100ng of GABA-conjugated BSA (A) and normal BSA (B) using GABA antibody at various dilutions.

Calcitonin Antibody (4901)
NBP1-30051 (1 publication)

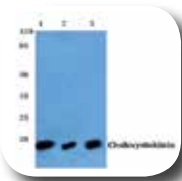
Species: Hu, Rt
Applications: ICC/IF



ICC/IF analysis of Calcitonin (red) in cryopreserved DRG neurons. Green staining is UCHL-1 and yellow represents their colocalization.

Cholecystokinin Antibody
NBP1-19789

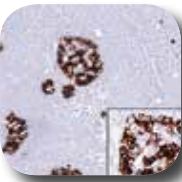
Species: Hu, Mu, Rt
Applications: WB, IHC-P



WB analysis of lysates from HEK293T cells (1) mouse liver (2) and rat spleen (3) using cholecystokinin antibody.

Insulin Antibody (2D11-H5)
NBP2-15195 (4 publications)

Species: Hu, Po, Bv
Applications: WB, ELISA, Flow, ICC/IF, IHC-Fr, IHC-P, IP



IHC-P analysis of a formalin-fixed human pancreas tissue section showing insulin staining in islets of Langerhaus.

Substance P Antibody
NB300-187 (6 publications)

Species: Hu, Mu, Rt
Applications: ICC/IF, IHC-Fr



IHC-Fr analysis of rat spinal cord dorsal horn showing Substance P (red) expression.

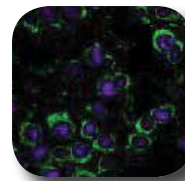
Most Popular Antibodies to Neurotransmitters

Target	Catalog	Clonality	Applications	Species
CHRNA1	NBP1-07122	Rb/Poly	WB, IHC-Fr, IHC-P	Hu, Mu, Rt
CHRNA7	NBP1-52375	Gt/Poly	ELISA, IHC-P	Hu, Mu, Rt, Bv, Ca
CHRNA3	NBP1-18793	Rb/Poly	WB, ELISA, IHC-P	Hu, Mu, Rt, Ch
CHRM2	NBP1-78990	Rt/Mono	IHC-Fr	Hu, Mu, Rt, Pm
CHRM4	NBP1-70994	Rb/Poly	ELISA, ICC/IF	Hu, Mu, Rt
CHRM1	NBP1-87466	Rb/Poly	ICC/IF, IHC-P	Hu, Rt
Dopamine D1 R	NB110-60017	Mu/Mono	WB, ICC/IF, IHC-Fr	Mu, Rt
Dopamine D2 R	NLS1403	Rb/Poly	IHC-P	Hu
DRD4	NBP1-00779	Rb/Poly	WB, ICC/IF, IHC-Fr, IHC-P	Hu, Mu, Rt
DRD5	NB110-60019	Mu/Mono	WB, ICC/IF, IHC	Mu, Rt
5-HT1D	NB100-56349	Rb/Poly	SW, WB	Hu, Mu, Rt
5-HT1B	NB100-56350	Rb/Poly	WB	Hu, Mu, Rt
5-HT1A	NBP2-21590	Rb/Poly	WB	Hu, Mu, Rt
5-HT2C	NB100-1524	Gt/Poly	WB, PEP-ELISA	Hu
Histamine H1 R	NBP1-89437	Rb/Poly	ICC/IF, IHC-P	Hu
Histamine H2 R	NBP1-86082	Rb/Poly	IHC-P	Hu
Histamine H3 R	NBP1-00869	Rb/Poly	WB, ICC/IF	Hu, Mu, Rt
GABA-A R alpha 1	NB300-191	Rb/Poly	WB, DB, ICC/IF, IP	Hu, Mu, Rt
GABA-A R beta 3	NB300-199	Rb/Poly	SW, WB, ICC/IF, IHC-Fr	Hu, Mu, Rt
GABA-A R gamma 2	NB300-190	Rb/Poly	WB, IHC-P	Hu, Mu, Rt
GABA-A R gamma 3	NB100-56662	Rb/Poly	WB	Hu, Mu, Rt
GABA-A R delta	NB300-200	Rb/Poly	WB, IHC-Fr, IP	Hu, Mu, Rt
mGluR6	NB300-189	Rb/Poly	WB, ICC/IF, IHC-Fr	Mu, Rt
mGluR1	NLS882	Rb/Poly	IHC-P	Hu
mGluR2	NBP1-68855	Gt/Poly	WB, IHC-P, PEP-ELISA	Hu
mGluR7	NLS917	Rb/Poly	WB, IHC-P	Hu, Mu, Rt, Bv, Ca, Eq, Pm
GLRA1	NB300-113	Rb/Poly	WB, IHC-Fr	Hu, Mu, Rt
GRPR	NB100-74434	Rb/Poly	WB, IHC-P	Hu
Calcitonin R	NB600-697	Mu/Mono	WB, ELISA, Flow, ICC/IF, IHC-Fr, IHC-P	Hu, Rb
CCK-A R	NB100-2805	Gt/Poly	WB, ICC/IF, IHC-P, PEP-ELISA	Hu, Rt
Insulin R	NBP1-51311	Rb/Poly	WB	Hu, Mu, Rt
INSR-beta	NBP1-19192	Mu/Mono	WB	Hu, Mu, Rt, Po, Bv, Rb, Sh
CCKBR	NB100-2803	Gt/Poly	WB, ICC/IF, IHC-P, PEP-ELISA	Hu, Rt
NK1R	NB300-119	Rb/Poly	WB, Flow, ICC/IF, IHC-P	Hu, Mu, Rt
NK1R	NB300-101	Rb/Poly	WB, ICC/IF, IHC-Fr, IHC-P	Hu, Mu, Rt, Gp
NTSR2	NB100-56472	Rb/Poly	WB, IHC-P	Hu, Mu
Glucagon R	NBP1-00850	Rb/Poly	WB, ICC/IF, IHC-Fr	Hu, Mu, Rt
Prolactin R	NB300-561	Mu/Mono	WB, Flow, ICC/IF, IHC-Fr, IHC-P, IP	Hu, Rt, Po, Eq, Rb
SSTR5	NB100-56498	Rb/Poly	WB, IHC-P	Hu

Dopamine D1 R Antibody (SG2-D1A) NB110-60017 (3 publications)

Species: Mu, Rt

Applications: WB, ICC/IF, IHC-Fr



IHC analysis of a frozen section of rat retinal tissue showing DRD1 expression.

GABA-A R alpha 1 Antibody NB300-191 (9 publications)

Species: Hu, Mu, Rt

Applications: WB, DB, ICC/IF, IP

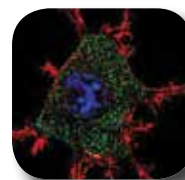


WB analysis of forebrain tissue lysates from wildtype rats (A) and alpha1-knockout rats (B).

CHRNA4 Antibody NB120-2804 (3 Publications)

Species: Mu, Rt, Am, Ch, Fi

Applications: WB, ICC/IF, IHC-Fr, IHC-P, IP

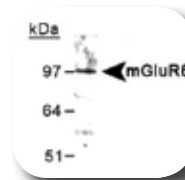


ICC/IF analysis of Neuro-2a cells using CHRNA4 antibody (green), Phalloidin staining for F-Actin (red) and DAPI for the nuclei (blue).

mGluR6 Antibody NB300-189 (3 publications)

Species: Mu, Rt

Applications: WB, ICC/IF, IHC-Fr



WB analysis of mouse brain tissue lysate showing a specific mGluR6 band above 95kDa.

Prolactin R Antibody (U5) NB300-561 (10 publications)

Species: Hu, Rt, Po, Eq, Rb

Applications: WB, Flow, ICC/IF, IHC-Fr, IHC-P, IP



IHC analysis of a formalin fixed paraffin embedded tissue section of lactating mare/equine mammary gland.

Target	Catalog	Clonality	Applications	Species
OXTR	NBP1-28487	Gt/Poly	WB, ICC/IF, IHC-P, PEP-ELISA	Hu, Rt
NPY2R	NB100-56480	Rb/Poly	WB, IHC-P	Hu, Pm
NPY5R	NB100-1538	Gt/Poly	WB, IHC-P, PEP-ELISA	Hu, Rt
SSTR1	NBP2-27413	Rb/Poly	WB	Hu, Mu, Rt
SSTR2	NB300-157	Rb/Poly	WB, Flow, ICC/IF, IHC-Fr, IHC-P, IP	Hu, Mu, Rt
SSTR3	NB100-74538	Rb/Poly	WB, ICC/IF, IHC-P	Hu

OXTR Antibody NBP1-28487 (1 Publication)

Species: Hu, Rt

Applications: WB, ICC/IF, IHC-P, PEP-ELISA



ICC/IF analysis of cultured human prostate stromal cells using OXTR antibody.

Species Key: Bv (Bovine), Ca (Canine), Ch (Chicken), Eq (Equine), Fi (Fish), Gp (Guinea Pig), Gt (Goat), Hu (Human), Mu (Mouse), Pm (Non-human Primates), Po (Porcine), Rb (Rabbit), Rt (Rat), Sh (Sheep), Xp (Xenopus)

Applications Key: DB (Dot Blot), ELISA (ELISA Capture and/or Detection), Flow (Flow Cytometry), ICC/IF (Immunocytochemistry/Immunofluorescence), IHC-Fr (Immunohistochemistry-Frozen), IHC-FrFI (Immunohistochemistry-Free Floating), IHC-P (Immunohistochemistry-Paraffin), IP (Immunoprecipitation), PEP-ELISA (Peptide ELISA), SW (Simple Western), WB (Western blot)

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