

A microscopic image showing several cells with prominent lipid droplets. The droplets are spherical and have a color gradient from yellow to red, indicating different lipid compositions. The cells are surrounded by a complex network of fibrous structures, likely the cytoskeleton or extracellular matrix.

CATALOG OF ANTIBODIES FOR
**LIPID AND
METABOLISM
RESEARCH**

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Application Key

- BL** - Blocking
- CA** - Competitive Assay
- ChIP** - Chromatin IP
- EIA** - Enzyme Immunoassay
- ELISA** - Enzyme-Linked Immunosorbent Assay
- EMSA** - Electrophoretic Mobility Shift Assay
- FACS** - Fluorescent Activated Cell Sorting
- GS** - Gel Shift Assay
- ICC** - Immunocytochemistry
- IF** - Immunofluorescence
- IHC** - Immunohistochemistry
- IHC-Fr** - Immunohistochemistry Frozen
- IHC-P** - Immunohistochemistry Paraffin
- IP** - Immunoprecipitation
- PEP-ELISA** - Peptide ELISA
- RID** - Radioimmunodiffusion
- WB** - Western Blot

Reactivity Key

- Bv** - Bovine
- Ca** - Canine
- Ch** - Chicken
- Eq** - Equine
- Fe** - Feline
- Fi** - Fish
- Ft** - Ferret
- Ha** - Hamster
- Hu** - Human
- Mi** - Mink
- Mk** - Monkey
- Mu** - Mouse
- Po** - Porcine
- Rb** - Rabbit
- Rt** - Rat
- Sh** - Sheep
- Xp** - Xenopus
- Ye** - Yeast
- Ze** - Zebra Fish



Cover Image

Scanning electron micrograph of adipocytes (orange) in human adipose connective tissue.

Lipid and Metabolism

The incidence of obesity, diabetes and metabolic disorders is rising dramatically in developed countries. In the United States, the estimated economic cost of diabetes was \$174 billion in 2007. The prevalence of diabetes has risen steadily over the past three decades, starting at 2.5% in 1980 and increasing to 4.2% in 2002 and 5.8% in 2007. If the current trend continues, projections indicate a diabetes rate of 12% by 2050.

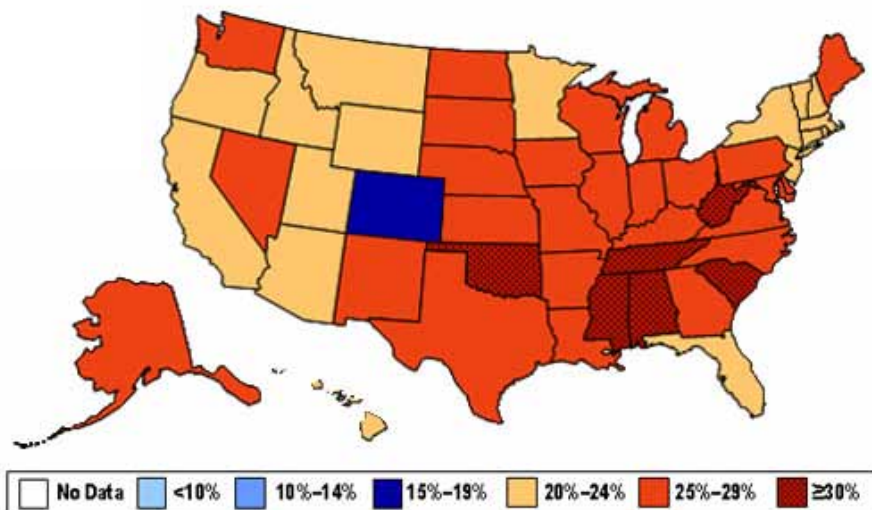
Diabetics are up to four times more likely to suffer a stroke or have heart disease than non-diabetics. Diabetes is the leading cause of blindness and kidney failure in adults and is responsible for 60% of all lower extremity amputations. The development of Type 2 diabetes is intimately associated with obesity and insulin resistance. Up to 40% of individuals with impaired glucose metabolism develop diabetes within five years.

Given the ever-increasing prevalence of obesity and our aging population, it is becoming increasingly important to gain a better understanding of how our bodies metabolize and store food on both a systemic and cellular level and the pathologies involved in these processes.

Diseases associated with obesity:

- Hypertension
- Dyslipidemia
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (endometrial, breast, and colon)

Adult Obesity Rates in the United States



CDC: U.S. Obesity Trends 1985-2008

ABC Transporter Antibodies

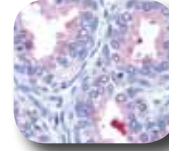
ATP-binding cassette transporters (ABC transporters) are transmembrane proteins that transport a wide variety of substrates, including metabolic products, lipids and sterols, and drugs across both extra and intracellular membranes. ABC transporters are

associated with a wide range of human diseases, including tumor resistance, cystic fibrosis, bacterial multidrug resistance, and other inherited human diseases.

Catalog #	Product	Host	Type	Application	Species
NB400-105	ABCA1	Rabbit	Polyclonal	IHC-P, IF, IP, WB, ICC, FACS	Ha, Hu, Mu, Rt
NB400-164	ABCA1 (3A1.891.3)	Rat	Monoclonal	WB	Mu
NB400-165	ABCA1 (5A1-1422.11)	Rat	Monoclonal	FACS	Mu
NB100-2068	ABCA1 (HJ1)	Mouse	Monoclonal	WB	Mu, Rt
NB100-93467	ABCA2	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NB100-93468	ABCA4	Goat	Polyclonal	ELISA, WB	Hu, Ca
NB400-163	ABCA7 (7A1-144)	Rat	Monoclonal	WB, FACS	Mu
NB400-166	ABCA7 (7A1-144)	Rat	Monoclonal	WB, FACS	Mu
NB100-93469	ABCA9	Goat	Polyclonal	ELISA, WB	Hu
NB100-93466	ABCA12	Goat	Polyclonal	ELISA, WB	Hu, Ca
NB100-93365	ABCB5	Goat	Polyclonal	ELISA, WB	Hu
NBPI-18886	ABCB9	Rabbit	Polyclonal	IP, WB	Hu
NB100-94880	ABCB10	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NB100-94881	ABCC5	Goat	Polyclonal	ELISA, WB	Hu, Mu, Bv
NBPI-00138	ABCC8	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt, Ca
NB100-96913	ABCD1	Goat	Polyclonal	ELISA, WB	Hu
NBPI-20871	ABCD3	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt
NB400-116	ABCE1	Rabbit	Polyclonal	WB	Hu
NB400-115	ABCF2	Rabbit	Polyclonal	WB	Ye
NB400-132	ABCG1	Rabbit	Polyclonal	IHC, WB	Hu, Mu
NBPI-20874	ABCG4	Goat	Polyclonal	ELISA	Hu, Mu, Rt, Ca

SAMPLE SIZES AVAILABLE

ABCA1 Antibody NB400-105

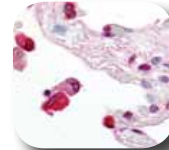


Immunohistochemical analysis of prostate epithelium using NB400-105.

Species: Ha, Hu, Mu, Rt

Applications: FACS, IF, IP, WB, ICC, IHC-P

ABCG1 Antibody NB400-132



Immunohistochemical analysis of lung, alveolar macrophages using NB400-132.

Species: Hu, Mu

Applications: IHC, WB

Scavenger Receptor Antibodies

High density lipoproteins (HDLs) play a critical role in cholesterol metabolism. Their plasma concentrations are inversely correlated with risk for atherosclerosis. The Scavenger Receptor Class B1 (SR-B1) binds HDLs

with high affinity and mediates selective uptake of HDL cholesteryl ester. SR-B1 is expressed primarily in liver and nonplacental steroidogenic tissues, and mediates selective cholesterol uptake by a distinct mechanism.

Catalog #	Product	Host	Type	Application	Species
NB400-104	SR-BI	Rabbit	Polyclonal	IP, WB, IHC	Mu, Rt, Ha, Hu
NB400-101	SR-BI	Rabbit	Polyclonal	IP, WB, FACS	Ha, Mu, Rt, Hu
NB400-113	SR-BI	Rabbit	Polyclonal	IP	Hu, Mu
NB400-131	SR-BI	Goat	Polyclonal	IF, WB, ICC	Mu, Mi, Rt, Ha
NB400-134	SR-BI/BI1	Rabbit	Polyclonal	IF, WB, IHC	Mu
NB400-102	SR-BI1	Rabbit	Polyclonal	IF, WB, IHC-P	Bv, Ha, Hu, Mu, Rt

SAMPLE SIZES AVAILABLE

SR-BI Antibody NB400-131



Western blot analysis of SR-BI in mouse liver lysate using NB400-131.

Species: Mu, Mi, Rt, Ha

Applications: IF, WB, ICC

SR-BI Antibody NB400-104



Immunohistochemical analysis of the adrenal cortex using NB400-104.

Species: Hu, Mu, Ha, Rt

Applications: IHC, IP, WB

SR-BI Antibody NB400-101



Western blot analysis of SR-BI in mouse liver lysate using NB400-101.

Species: Ha, Hu, Mu, Rt

Applications: FACS, IP, WB

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Includes:
NB400-101
NB400-104
NB400-131

Metabolism and Neurodegeneration Antibodies

Lipid storage diseases, or lipidoses, are a group of inherited metabolic disorders in which harmful amounts of lipids accumulate in certain cells and tissues. People with these disorders do not produce enough of one of the enzymes needed to metabolize lipids or produce enzymes that do not work properly. Over time, this accumulation of fats can cause permanent cellular and tissue damage, particularly in the brain, peripheral nervous system, liver, spleen, and

bone marrow. Niemann-Pick disease is an autosomal recessive disorder resulting in an accumulation of fat and cholesterol in cells of the liver, spleen, bone marrow, lungs, and in some patients, the brain. Neurological complications may include ataxia, eye paralysis, brain degeneration, learning problems, spasticity, feeding and swallowing difficulties, slurred speech, loss of muscle tone, hypersensitivity to touch, and some corneal clouding.

Catalog#	Product	Host	Type	Application	Species
NB400-147	Apolipoprotein A1	Goat	Polyclonal	ELISA, IHC, WB	Hu
NB600-1538	Apolipoprotein A1	Sheep	Polyclonal	IHC-Fr	Ca, Hu, Rb
NB600-609	Apolipoprotein A1	Goat	Polyclonal	ELISA, WB, IHC-P	Mu
NB600-1303	Apolipoprotein A2	Goat	Polyclonal	ELISA, IHC-P, WB	Hu
NB100-57089	Apolipoprotein A4	Goat	Polyclonal	ELISA, WB	Hu
NBP1-06019	Apolipoprotein A4	Goat	Polyclonal	ELISA, WB	Mu
NB400-139	Apolipoprotein A5 (1G5G9)	Mouse	Monoclonal	ELISA, WB	Hu
NB400-138	Apolipoprotein A5 (4H8H8E2)	Mouse	Monoclonal	ELISA	Hu
NB110-55454	Apolipoprotein A5 (1G5G9)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-57307	Apolipoprotein A5 (4H8H8E2)	Mouse	Monoclonal	ELISA	Hu
NB120-7616	Apolipoprotein B	Goat	Polyclonal	ELISA, IHC, WB	Hu
NB400-154	Apolipoprotein C1	Goat	Polyclonal	ELISA, IHC, WB	Hu
NB400-155	Apolipoprotein C2	Goat	Polyclonal	ELISA, IHC, WB	Hu
NB600-610	Apolipoprotein C3	Goat	Polyclonal	ELISA, IHC-P, IP, WB	Hu
NB100-2040	Apolipoprotein E	Rabbit	Polyclonal	WB	Mu
NB400-158	Apolipoprotein E	Goat	Polyclonal	ELISA, IHC-P, WB	Hu
NB100-1530	Apolipoprotein E	Goat	Polyclonal	ELISA, WB, IHC-P, PEP-ELISA	Hu
NB110-60531	Apolipoprotein E (WUE-4)	Mouse	Monoclonal	ELISA, WB, IHC	Hu
NB100-2216	Apolipoprotein ER2	Rabbit	Polyclonal	WB	Mu, Hu, Ch
NB100-2217	Apolipoprotein ER2	Rabbit	Polyclonal	WB	Mu, Hu, Bv, Ch
NBP1-05770	Apolipoprotein A-I	Goat	Polyclonal	ELISA, IHC, WB, IHC-P	Mu
NB600-616	Apolipoprotein J	Goat	Polyclonal	ELISA, IHC, WB	Hu

Apo A5 (1G5G9) Antibody NB400-139



Western blot analysis of a Apo A5 in HepG2 cell lysate using NB400-139.

Species: Hu
Applications: ELISA, WB

Apo A5 (1G5G9) Antibody NB110-55454



Immunohistochemical analysis of human anaplastic lymphoma using NB110-55454.

Species: Hu
Applications: ELISA, WB

Apo A1 (EP1368Y) Antibody NB110-55465



Immunohistochemical analysis of human liver using NB110-55465.

Species: Hu
Applications: IHC, IP, WB, ICC

Apo ER2 Antibody NB100-2216



Western blot analysis of ApoER2 in mouse brain lysate using NB100-2216.

Species: Mu, Hu, Ch
Applications: WB

Apo ER2 Antibody NB100-2217



Western blot analysis of ApoER2 in mouse brain membrane lysate using NB100-2217.

Species: Mu, Hu, Bv, Ch
Applications: WB

Abnova, Acris, biosensis, Innova

Novus distributes for these companies:



Innova Biosciences

Metabolism and Neurodegeneration Antibodies

Catalog#	Product	Host	Type	Application	Species
NB120-12498	AMACR	Rabbit	Polyclonal	IHC	Hu
NB400-152	Cathepsin E	Rabbit	Polyclonal	WB, IF	Hu, Mu, Rt
NB100-2911	Ceramide Kinase	Rabbit	Polyclonal	WB	Hu
NB400-140	Cyp-46	Rabbit	Polyclonal	IHC-P, WB	Hu
NB400-114	Fatty Acid Synthase	Rabbit	Polyclonal	WB, IP, IHC-P	Ch, Hu, Mu, Po, Mk, Rt
NB100-1797	IRP2	Rabbit	Polyclonal	WB	Mu
NB100-1798	IRP2	Rabbit	Polyclonal	WB	Mu
NB400-159	Macrophage Scavenger Receptor 1	Rabbit	Polyclonal	WB	Hu, Mk
NB100-1560	Macrophage Scavenger Receptor 1	Goat	Polyclonal	ELISA, IHC-P, WB	Hu
NB400-148	Niemann-Pick C1	Rabbit	Polyclonal	IHC, IF, IP, WB	Ha, Hu, Mu
NB400-127	Niemann-Pick C1L1	Rabbit	Polyclonal	WB, IHC-P	Rt, Mu
NB400-128	Niemann-Pick C1L1	Rabbit	Polyclonal	WB, IHC	Hu, Rt
NB400-146	Thimet Oligopeptidase (4D6)	Mouse	Monoclonal	WB, ICC	Hu
NB100-1918	WFS1	Rabbit	Polyclonal	WB, IP, IHC-Fr, IF	Hu, Mu, Rt

Ceramide Kinase Antibody NB100-2911



Western blot analysis of ceramide kinase in A549 cell lysate using NB100-2911.

Species: Hu
Applications: WB

Thimet Oligopeptidase (4D6) Antibody NB400-146



Western blot analysis of HeLa whole cell lysate using NB400-146.

Species: Hu
Applications: WB, ICC

IRP2 Antibody NB100-1797



Western blot analysis of IRP2 in mouse liver lysate using NB100-1797.

Species: Mu
Applications: WB

WFS1 Antibody NB100-1918



Immunoprecipitation of WFS1 using NB100-1918. Precipitated lysate is INS-1.

Species: Hu, Mu, Rt
Applications: IF, IP, WB, IHC-Fr

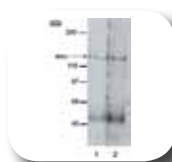
MSR Antibody NB400-159



Western blot analysis of MSR in mouse liver lysate using NB400-159.

Species: Hu, Mk
Applications: WB

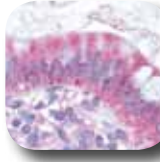
Niemann-Pick C1L1 Antibody NB400-127



Western blot analysis of NPC3 in rat small intestine using NB400-127.

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

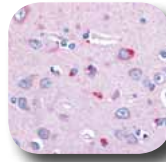
Niemann-Pick C1L1 Antibody NB400-128



Immunohistochemical analysis of small intestine, enterocytes using NB400-128.

Species: Hu, Rt
Applications: IHC, WB

Niemann-Pick C1 Antibody NB400-148



Immunohistochemical analysis of neurons and astrocytes using NB400-148.

Species: Ha, Hu, Mu
Applications: IHC, IF, IP, WB

How To Series CDs

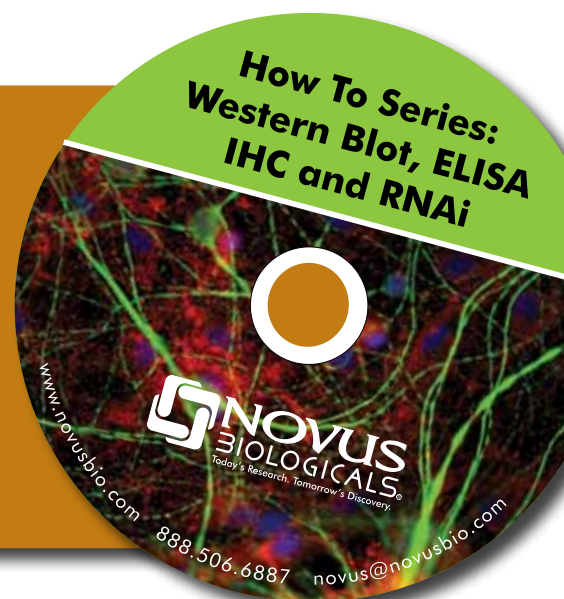
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Lipid Droplet Antibodies

Organisms store excess energy as triacylglycerol in the form of lipid droplets. Lipid droplets are dynamic structures which change in size, subcellular location and protein content. Lipid droplets appear to mature and migrate centrally with concurrent changes in the composition of the lipid droplet coat proteins (PAT family members). The first detectable droplets collect on the cell periphery and contain TIP47. As the droplets enlarge, they migrate inward and the TIP47 is replaced by ADFP (adipophilin). In the largest centrally located droplets, perilipin displaces the other PAT family members to become the major

coat protein present. Recently, a new PAT family member, OXPAT, has been identified. OXPAT appears to be expressed predominately in tissues, that have a high utilization turnover of lipid stores such as heart, liver and skeletal muscle. Lipid stores are utilized for energy through the actions of a series of lipases. Lipolysis is initiated by beta-adrenergic G-protein coupled receptors, acting through PKA to activate a series of lipases including ATGL, HSL and MGL. These lipases catabolize the stored triacylglycerol into glycerol and free fatty acids which can then be metabolized in the mitochondria to produce ATP.

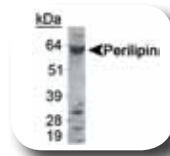
ADFP Antibody NB110-40878



Western blot analysis of human ADFP in human liver lysate using NB110-40878.

Species: Bv, Hu, Po, Mk, Mu
Applications: WB

Perilipin Antibody NB110-40760

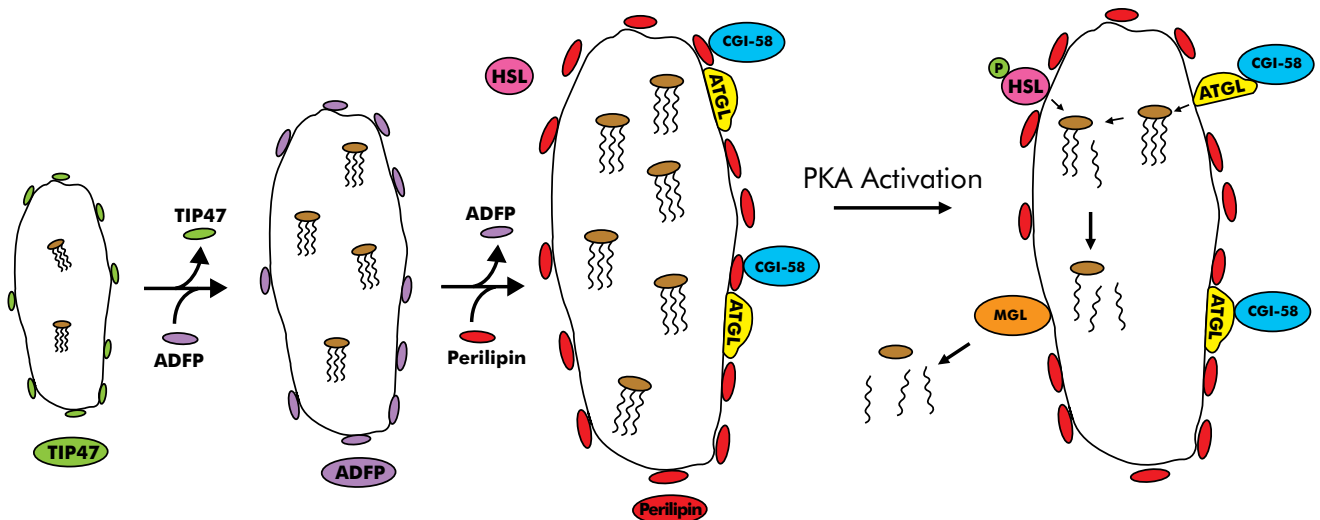


Western blot analysis of perilipin in human liver using NB110-40760.

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

Catalog #	Product	Host	Type	Application	Species
NB110-40878	ADFP	Rabbit	Polyclonal	WB	Hu, Bv, Po, Mk, Mu
NB110-40877	ADFP	Rabbit	Polyclonal	WB	Hu, Mu
NB110-41536	ATGL	Rabbit	Polyclonal	WB	Hu, Mu
NB100-1794	Caveolin 1	Goat	Polyclonal	ELISA, WB	Hu
NB100-615	Caveolin 1 (7CB)	Mouse	Monoclonal	IF, IP, WB	Hu, Mu, Rt
NB110-41576	CGI58	Rabbit	Polyclonal	WB	Hu
NB110-41487	DGAT1	Rabbit	Polyclonal	WB	Hu, Mu, Bv, Ze, Rt
NB110-37253	HSL	Rabbit	Polyclonal	WB	Hu, Rt
NB110-60509	OXPAT	Rabbit	Polyclonal	IHC, WB	Bv, Hu, Mu
NB110-60511	OXPAT	Rabbit	Polyclonal	WB	Hu, Mu
NB100-60554	Perilipin	Goat	Polyclonal	ELISA, IF, WB	Hu, Ca, Rt
NB110-40760	Perilipin	Rabbit	Polyclonal	WB	Hu, Rt, Mu, Po
NB120-3526	Perilipin A	Rabbit	Polyclonal	WB	Mu
NB300-631	Perilipin A + B	Rabbit	Polyclonal	WB	Mu
NB110-40764	TIP47	Rabbit	Polyclonal	WB	Hu, Mu, Mk, Po
NB110-40765	TIP47	Rabbit	Polyclonal	WB	Hu, Mu

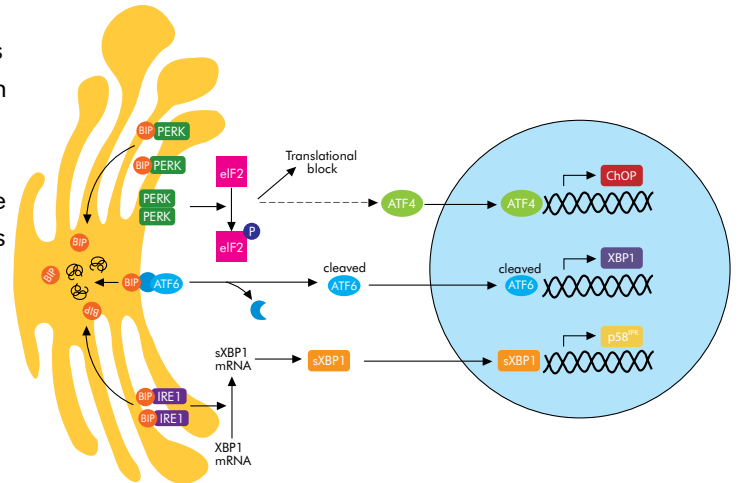
SAMPLE SIZES AVAILABLE



Unfolded Protein Response Antibodies

The endoplasmic reticulum (ER) is the production site of protein and lipid components of cellular organelles. Within the ER, misfolded proteins are detected by BiP (also known as GRP78). In the presence of misfolded proteins, BiP disassociates from PERK, allowing it to homodimerize and autophosphorylate. In this activated form, PERK phosphorylates eIF2. The phosphorylation of eIF2 blocks the majority of translation to prevent the continued accumulation of protein in the ER. At the same time, certain genes (i.e. those carrying internal ribosome entry sites) can bypass this translational block. Among these proteins, ATF4 is the best studied. ATF4 acts to up-regulate unfolded protein response (UPR) genes, the DNA damage inducible gene CHOP (also known as GADD153). BiP also binds to IRE1 and ATF6 under normal conditions, but disassociates upon accumulation of misfolded proteins. Unbound ATF6 is translocated to the Golgi apparatus where it is cleaved into an active form. Activated ATF6 is then able to upregulate transcription of UPR genes,

including XBP1. Activated IRE1 acts as an endoribonuclease to cleave an intron from XBP1 transcripts. The XBP1 splice variant codes for a transcription factor that initiates transcription of P58IPK. P58IPK is a HSP40 protein which binds to and inhibits PERK. Once the accumulated, misfolded proteins have been removed, P58IPK acts to shut down the UPR by removing the translational block.



Catalog#	Product	Host	Type	Application	Species
H00000468-A01	ATF4	Mouse	Polyclonal	ELISA, WB	Hu
H00000468-M01	ATF4 (2B3)	Mouse	Monoclonal	ELISA, IF, WB	Hu, Mu
NB300-896	ATF6	Goat	Polyclonal	ELISA, WB	Hu, Mu
NBP1-06274	BiP/GRP78	Rabbit	Polyclonal	WB	Ch, Hu, Mu, Rt, Sh
NBP1-06277	BiP/GRP78	Rabbit	Polyclonal	WB	Hu, Mu, Rt
NB100-56413	BiP/GRP78	Rabbit	Polyclonal	WB	Hu
NB300-520	BiP/GRP78	Rabbit	Polyclonal	WB	Ha, Rt, Mu
NLS3278	BiP/GRP78	Rabbit	Polyclonal	IHC-P	Hu
NLS443	BiP/GRP78	Rabbit	Polyclonal	IHC-P, IHC, Fr	Hu
NB600-1335	CHOP (9C8)	Mouse	Monoclonal	IP, WB	Hu, Mu
NB120-10444	DDIT3	Rabbit	Polyclonal	WB	Hu, Rt
NB100-448	Derlin-1	Rabbit	Polyclonal	IHC, WB	Ca, Hu
NB100-447	Derlin-1	Rabbit	Polyclonal	WB	Ca
NB100-663	eIF-2alpha (EIF2a)	Mouse	Monoclonal	WB	Hu, Mu, Rt
NB100-2249	eIF-2alpha	Rabbit	Polyclonal	WB, IP	Hu, Mu
NB110-56949	eIF-2alpha (E90) [Ser51]	Rabbit	Monoclonal	IHC, WB, ICC	Hu, Mu, Rt
NB100-778	GADD 34	Goat	Polyclonal	ELISA, WB	Hu
H00003309-A01	HSPA5	Mouse	Polyclonal	ELISA, WB	Hu
NB100-1112	IRE1	Goat	Polyclonal	ELISA, WB	Hu
NB110-59971	IRE1 alpha	Rabbit	Polyclonal	WB	Hu, Mu
NB100-2324	IRE1 alpha	Rabbit	Polyclonal	WB	Hu, Mu, Rt
NB100-2323	IRE1 alpha [Ser724]	Rabbit	Polyclonal	WB	Hu, Mu, Rt
NB110-57306	p58 (EP597Y)	Rabbit	Monoclonal	WB	Hu
H00006499-A01	SKI2	Mouse	Polyclonal	ELISA, WB	Hu
H00007494-M04	XBP1 (4E4)	Mouse	Monoclonal	ELISA, WB	Hu

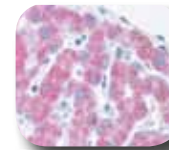
BiP/GRP78 Antibody NLS443



Immunohistochemical analysis of placenta using NLS443.

Species: Hu
Applications: IHC-P, IHC-Fr

Derlin-1 Antibody NB100-448



Immunohistochemical analysis of liver hepatocytes using NB100-448.

Species: Ca, Hu
Applications: IHC, WB

GADD 34 Antibody NB100-778



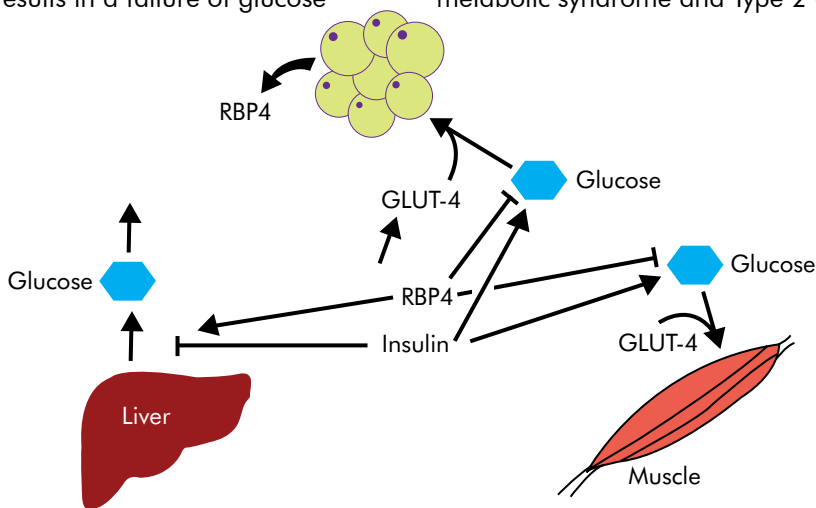
Western blot analysis of U937 lysate using NB100-778.

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

Obesity, Diabetes and Insulin Resistance

In the bloodstream, insulin acts to control blood sugar levels by regulating the uptake of glucose from the blood and glucose secretions from the liver. Under normal physiological conditions, adipose tissue can function as a signaling center, releasing adipokines which modulate this pathway. Under conditions of starvation or obesity, this cycle becomes perturbed and the action of the glucose transporter GLUT-4 is blocked, possibly through an increase in RBP4 release by adipocytes. This results in a failure of glucose

uptake by the muscle and adipose tissue, while glucose secretion from the liver remains active. This results in high levels of both glucose and insulin in the bloodstream, a condition known as insulin resistance. In a state of insulin resistance, the body secretes normal amounts of insulin, but is unable to respond properly to the insulin and regulate blood sugar levels. Insulin resistance is considered a pre-diabetic state and can lead to the development of metabolic syndrome and Type 2 diabetes.



Catalog#	Product	Host	Type	Application	Species
NB100-55246	ACC1	Rabbit	Polyclonal	IP	Hu
NB100-55247	ACC1	Rabbit	Polyclonal	WB	Hu
NB110-6026	Acrp30	Rabbit	Polyclonal	IP, WB	Mu
NB120-16086	Acrp30 (Ne.Na)	Mouse	Monoclonal	ELISA, IP, WB	Hu
NB600-1191	Adiponectin	Goat	Polyclonal	ELISA, WB	Hu
NBP1-26387	Adropin	Rabbit	Polyclonal	WB	Hu, Mu
NB100-2389	AGPAT6	Rabbit	Polyclonal	WB	Hu, Mu, Mk
NB100-2390	AGPAT6	Rabbit	Polyclonal	WB	Hu, Mu, Mk
NB600-912	Alcohol Dehydrogenase	Rabbit	Polyclonal	ELISA	Ye
NB600-913	Alcohol Dehydrogenase, HRP	Rabbit	Polyclonal	ELISA	Ye
NB600-914	Aldehyde Dehydrogenase	Rabbit	Polyclonal	ELISA, IP, WB	Ye
NB110-41536	ATGL	Rabbit	Polyclonal	WB	Hu, Mu
NB100-60552	CCKA Receptor	Goat	Polyclonal	ELISA, WB	Rt, Mu
NB300-511	CFTR (CF3)	Rabbit	Monoclonal	IF, IP, WB	Hu, Mu
NB600-577	CFTR (M3A7)	Mouse	Monoclonal	IHC	Hu
NB110-55630	CFTR	Rabbit	Polyclonal	IHC	Hu
NB110-41487	DGAT1	Rabbit	Polyclonal	WB	Hu, Mu, Bv, Ze, Rt
NB110-60930	Endothelial Lipase	Rabbit	Polyclonal	WB	Hu, Mu
NB100-57083	FADS1	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt, Ca
NB400-114	Fatty Acid Synthase	Rabbit	Polyclonal	IP, WB, IHC-P	Ch, Hu, Mu, Po, Mk, Rt
NB100-1506	GAD65	Goat	Polyclonal	ELISA, WB	Hu
NB100-74427	GLUT-4	Rabbit	Polyclonal	IP, WB, IHC-P, IHC-Fr	Rt
NB110-37253	Hormone-Sensitive Lipase	Rabbit	Polyclonal	WB	Hu, Rt
NB120-17652	Hormone-Sensitive Lipase	Chicken	Polyclonal	ELISA, WB	Hu, Mu, Rt
NB400-142	Insulin Receptor (MA-20)	Mouse	Monoclonal	IP, ELISA, WB	Hu, Rt

AGPAT6 Antibody NB100-2389



Western blot analysis of AGPAT6 in mouse skeletal muscle using NB100-2389.

Species: Hu
Applications: IHC, IP, WB, ICC

Glucose Transporter 4 Antibody NB100-74427



Western blot analysis of GLUT4 from rat heart using NB100-74427.

Species: Rt
Applications: IP, WB, IHC-P, IHC-Fr

HSL Antibody NB110-37253



Western blot analysis of HSL using NB110-37253. Lane 1: Liver extract (negative control) Lane 2: Fat extract

Species: Hu
Applications: IHC, IP, WB, ICC

Obesity, Diabetes and Insulin Resistance

LIPG Antibody NB110-60930



Western blot analysis of LIPG in liver lysate using NB110-60930. Lane 1: human liver Lane 2: mouse liver

Species: Hu, Mu
Applications: WB

OXPAT Antibody NB110-60511



Western blot analysis of OXPAT in heart lysate using NB110-60511. Lane 1: human heart Lane 2: mouse heart

Species: Hu, Mu
Applications: WB

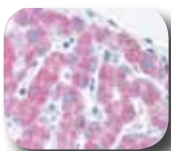
RBP4 (3D12) Antibody H00005950-M07



Immunohistochemical analysis of human small intestine using H00005950-M07.

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

NOX4 Antibody NB110-58849



Immunohistochemical analysis of proximal convoluted tubules of the kidney using NB110-58849.

Species: IHC, WB
Applications: Hu, Mu, Rt, Bv, Sh, Mk

PGC-1 Beta Antibody NB110-58858



Immunohistochemical analysis of human cortical neurons using NB110-58858.

Species: Hu
Applications: IHC, WB

SREBP1 Antibody NB100-2215



Western blot analysis of SREBP1 in liver lysates using NB100-2215. Lane 1: human liver Lane 2: mouse liver

Species: Ha, Mu, Po, Rt
Applications: WB

Catalog#	Product	Host	Type	Application	Species
NB110-59971	IRE1 alpha	Rabbit	Polyclonal	WB	Hu, Mu
NB100-2324	IRE1 alpha	Rabbit	Polyclonal	WB	Hu, Mu, Rt
NB100-2323	IRE1 alpha [Ser724]	Rabbit	Polyclonal	WB	Hu, Mu, Rt
NB120-7208	Leptin	Rabbit	Polyclonal	WB	Hu
NB110-8267	Leptin (10H1)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-8268	Leptin (3G7)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-8271	Leptin (9C10)	Mouse	Monoclonal	ELISA, WB	Hu
NB400-157	Liver X Receptor	Rabbit	Polyclonal	WB	Hu, Mk, Rt, Mu, Ch
NB300-612	Liver X Receptor alpha	Rabbit	Polyclonal	WB	Hu
NB110-6000	MRP 2 (M21-4)	Mouse	Monoclonal	IF, WB	Hu
NB110-58849	NOX4	Rabbit	Polyclonal	IHC, WB	Hu, Mu, Rt, Bv, Sh, Mk
NB110-58851	NOX4	Rabbit	Polyclonal	IHC, WB	Hu, Rt, Mk, Mu
NB110-60509	OXPAT	Rabbit	Polyclonal	IHC, WB	Bv, Hu, Mu
NB110-60511	OXPAT	Rabbit	Polyclonal	WB	Hu, Mu
NB400-149	PDZK1	Rabbit	Polyclonal	IF, WB	Bv, Hu, Mu
NB110-40760	Perilipin	Rabbit	Polyclonal	WB	Hu, Rt, Mu, Po
NB100-60554	Perilipin	Goat	Polyclonal	ELISA, IF, WB	Hu, Ca, Rt
NB120-3526	Perilipin A	Rabbit	Polyclonal	WB	Mu
NB300-631	Perilipin A + B	Rabbit	Polyclonal	WB	Mu
NB110-58858	PGC-1 beta	Rabbit	Polyclonal	IHC, WB	Hu
NB400-106	PLTP	Rabbit	Polyclonal	WB, IHC-P	Hu, Mu
NB600-637	PPAR delta	Rabbit	Polyclonal	ELISA, IHC, WB	Mu, Hu, Rt
NB100-55422	RBP4	Goat	Polyclonal	ELISA, WB	Hu, Ca, Mu, Rt
NB100-57084	RBP4	Goat	Polyclonal	ELISA, WB	Hu, Ca, Mu, Rt
H00005950-M07	RBP4 (3D12)	Mouse	Monoclonal	ELISA, IHC-P, WB	Hu
NB100-1486	Sorbitol Dehydrogenase	Goat	Polyclonal	ELISA, WB	Hu
NB100-60545	SREBP1	Rabbit	Polyclonal	WB	Hu, Rt, Ha, Mu
NB100-2215	SREBP1	Rabbit	Polyclonal	WB	Ha, Mu, Po, Rt
NB110-40764	TIP47	Rabbit	Polyclonal	WB	Hu, Mk, Po

WANT YOUR ANTIBODY PRODUCED FOR FREE?

Visit our website, www.novusbio.com and fill out the Antibody Grant Sheet for a chance to receive 2 mgs of FREE antibody!

Grant Award Date: 1 Award selected on the 15th of every month. Awardees will receive a 0.2 mg test sample of affinity purified rabbit sera. (Typical antibody production takes 4-5 months). If the product works and you supply the necessary documentation, you will receive **2 mgs** of affinity purified antibody in exchange for product feedback. Novus reserves the right to sell the antibody produced by the grant. Submit by the end of the month to be selected in the following month's drawing by fax (below) or email (novus@novusbio.com).

Metabolism and Cancer

Early in the last century, theories abounded as to how cancer arose in the body. One influential theory was that of Nobel laureate Otto Warburg. Warburg hypothesized that malignant growth occurred as a consequence of cells utilizing non-oxidative metabolism of glucose as opposed to oxidative respiration. However, with the discovery of oncogenes

and the association between DNA mutations and cancer, the role of metabolism and tumors was largely ignored. Focus has now returned to the role that cellular metabolism plays in tumorigenesis. Several recent studies support a link between obesity and the risk of developing certain types of cancers - check out the featured publications below to learn more.

Catalog #	Product	Host	Type	Application	Species
NB100-1121	ACADM	Goat	Polyclonal	WB, ELISA	Hu
NB110-40877	ADFP	Rabbit	Polyclonal	WB	Hu, Mu
NB110-40878	ADFP	Rabbit	Polyclonal	WB	Bv, Hu, Po, Mk, Mu
NB120-12498	AMACR	Rabbit	Polyclonal	IHC	Hu
NB100-1276	ARH	Goat	Polyclonal	ELISA, WB	Hu, Mu, Xp
NB300-896	ATF6	Goat	Polyclonal	ELISA, WB	Hu, Mu
NB400-152	Cathepsin E	Rabbit	Polyclonal	IF, WB	Hu, Mu, Rt
NB100-1794	Caveolin 1	Goat	Polyclonal	ELISA, WB	Hu
NB100-615	Caveolin 1 (7C8)	Mouse	Monoclonal	IF, IP, WB	Hu, Mu, Rt
NB300-858	CBR3	Goat	Polyclonal	ELISA, WB	Hu
NB100-2911	Ceramide Kinase	Rabbit	Polyclonal	WB	Hu
NB400-135	ChREBP	Rabbit	Polyclonal	IHC, IF, WB, IP, ChIP	Hu, Mu, Rt
NB400-136	ChREBP	Rabbit	Polyclonal	IF	Hu
NB100-1189	CLPP	Goat	Polyclonal	ELISA, WB	Hu
NB100-1057	CPT1B	Goat	Polyclonal	ELISA, WB	Hu
NB100-1338	CYP7B1	Goat	Polyclonal	WB, ELISA	Hu
NB100-1131	Cyt 19	Goat	Polyclonal	ELISA, WB	Hu
NB300-608	Cytochrome P450 1A1	Rabbit	Polyclonal	WB	Hu
NB120-3569	Cytochrome P450 1A2	Rabbit	Polyclonal	WB	Hu
NB120-3570	Cytochrome P450 2A6	Rabbit	Polyclonal	WB	Hu, Rt
NB300-632	Cytochrome P450 2C11	Rabbit	Polyclonal	IHC, WB	Rt, Fe
NB600-1396	Cytochrome P450 3A4	Rabbit	Polyclonal	WB	Hu, Rt
NB100-1068	DCXR	Goat	Polyclonal	ELISA, IHC, WB	Hu
NB100-2249	eIF2-alpha	Rabbit	Polyclonal	WB, IP	Hu, Mu
NB100-778	GADD 34	Goat	Polyclonal	ELISA, WB	Hu
NB110-39113	GLUT1	Rabbit	Polyclonal	IHC-P, WB	Hu, Mu, Rt, Bo, Rb
NB100-1369	Importin 13	Goat	Polyclonal	ELISA, WB	Hu

GLUT1 Antibody NB110-39113



Western blot analysis of GLUT1 in human kidney membrane lysates using NB110-39113.

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

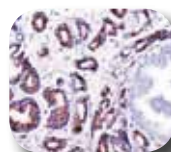
MCT2 Antibody NB300-877



Western blot analysis of MCT2 in A549 cell lysate using NB300-877.

Species: Hu
Applications: ELISA, WB

AMACR Antibody NB120-12498



Immunohistochemical analysis of human tonsil using NB120-12498.

Species: Hu
Applications: IHC

ChREBP Antibody NB400-135



Immunohistochemical analysis of human colon epithelium using NB400-135.

Species: Hu, Mu, Rt
Applications: ChIP, IF, IP, WB, IHC-P

ChREBP Antibody NB400-136



Immunohistochemical analysis of a human hepatocyte using NB400-136.

Species: Hu
Applications: IF

MSR1 Antibody NB400-159



Western blot analysis of MSR1 in mouse liver lysate using NB400-159.

Species: Hu, Mk
Applications: WB

FEATURED PUBLICATIONS

Renehan AG, et al. Body-mass index and incidence of cancer: a systematic review and meta-analysis of prospective observational studies. *Lancet*. 2008;371(9612):569-78. [PMID: 18280327]

Reeves GK, et al. Cancer incidence and mortality in relation to body mass index in the Million Women Study: cohort study. *BMJ*. 2007;335(7630):1134. [PMID: 17986716]

Metabolism and Cancer

MafA Antibody NB400-137

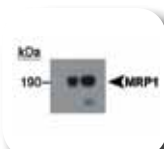


Western blot analysis of MafA in HeLa transfected cells using NB400-137.

Species: Mu

Applications: ChIP, IP, WB, IHC-P, IHC-Fr, GS

MRP1 (IU2H10) Antibody NB400-156

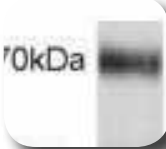


Western blot analysis of MRP1 in HEK293 transfected cells using NB400-156.

Species: Hu, Mu

Applications: IF, WB

MRP4 Antibody NB100-1471



Immunohistochemical analysis of human prostate using NB100-1471.

Species: Hu, Rt

Applications: ELISA, WB, IHC-P

PADI4 Antibody NB100-1476



Western blot analysis of PADI4 in human spleen using NB100-1476.

Species: Hu

Applications: ELISA, WB

PDK1 Antibody NB100-2384



Western blot analysis of PDK1 in human heart lysate using NB100-2384.

Species: Hu

Applications: WB

Sphingolipid Receptor Edg1 Antibody NLS1013

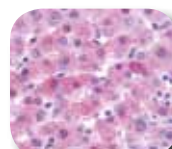


Immunohistochemical analysis of human brain (neurons and glia) using NLS1013.

Species: Hu

Applications: IHC-P

Sphingolipid Receptor Edg3 Antibody NLS1031



Immunohistochemical analysis of liver using NLS1031.

Species: Hu

Applications: IHC-P

Catalog #	Product	Host	Type	Application	Species
NB100-1503	Lipocalin 2	Goat	Polyclonal	ELISA, WB	Hu
NB400-159	MSR1	Rabbit	Polyclonal	WB	Hu, Mk
NB100-1560	MSR1	Goat	Polyclonal	ELISA, IHC-P, WB	Hu
NB400-137	MafA	Rabbit	Polyclonal	WB, ChIP, IHC-Fr, IHC-P, IP, GS	Hu, Mu
NB600-266	MafB	Rabbit	Polyclonal	WB, ChIP, IHC-Fr, IHC-P, IP	Mu
NB500-140	MARCKS [Ser152/Ser156]	Rabbit	Polyclonal	WB, IP	Rt
NB300-877	MCT2	Goat	Polyclonal	ELISA, WB	Hu
NB300-599	MLN 64	Rabbit	Polyclonal	WB	Rt
NB400-156	MRP1 (IU2H10)	Mouse	Monoclonal	WB, IF	Hu, Mu
NB110-57131	MRP1 (IU5C1)	Mouse	Monoclonal	WB, IF	Hu, Mu
NB100-1471	MRP4	Goat	Polyclonal	ELISA, WB, IHC-P	Hu, Rt
NB100-1303	MTCH1	Goat	Polyclonal	WB, ELISA	Hu
NB100-1331	ORP1	Goat	Polyclonal	WB, ELISA	Hu
NB100-1500	OSBP	Goat	Polyclonal	ELISA, WB	Hu
NB100-1330	OSBP2	Goat	Polyclonal	WB, ELISA	Hu
NB100-1337	OSBPL11	Goat	Polyclonal	WB, ELISA	Hu
NB100-1332	OSBPL2	Goat	Polyclonal	WB, ELISA	Hu
NB100-1333	OSBPL6	Goat	Polyclonal	WB, ELISA	Hu
NB100-1335	OSBPL7	Goat	Polyclonal	ELISA, WB	Hu
NB100-1336	OSBPL9	Goat	Polyclonal	WB, ELISA	Hu
NB100-1476	PADI4	Goat	Polyclonal	ELISA, WB	Hu
NB100-60556	PCK1 / PEPCKC	Goat	Polyclonal	ELISA, WB	Hu
NB100-1496	PDHX	Goat	Polyclonal	ELISA, WB, IHC-P	Hu
NB100-2383	PDK1	Rabbit	Polyclonal	WB	Hu
NB100-2384	PDK1	Rabbit	Polyclonal	WB	Hu
NB100-1111	PI 15	Goat	Polyclonal	ELISA, WB	Hu
NSB1100	PRAS40 [Thr246]	Rabbit	Polyclonal	WB	Hu, Mu
NB200-166	PTEN	Rabbit	Polyclonal	WB	Hu
NSB1064	PTEN	Rabbit	Polyclonal	WB	Hu
NSB1060	PTEN [Ser370]	Rabbit	Polyclonal	WB	Mu
NB100-1456	SCARF1	Goat	Polyclonal	ELISA, WB	Hu
NLS1012	Sphingolipid Receptor Edg1	Rabbit	Polyclonal	IHC-P	Hu
NLS1013	Sphingolipid Receptor Edg1	Rabbit	Polyclonal	IHC-P	Hu
NLS1031	Sphingolipid Receptor Edg3	Rabbit	Polyclonal	IHC-P, ICC	Hu
NB100-1491	SRD5A1	Goat	Polyclonal	ELISA	Hu
NB300-879	TXNRD1	Goat	Polyclonal	ELISA, WB	Hu
NB300-871	VDAC2	Goat	Polyclonal	ELISA, WB	Hu

Lipoprotein Metabolism/Cholesterol Homeostasis

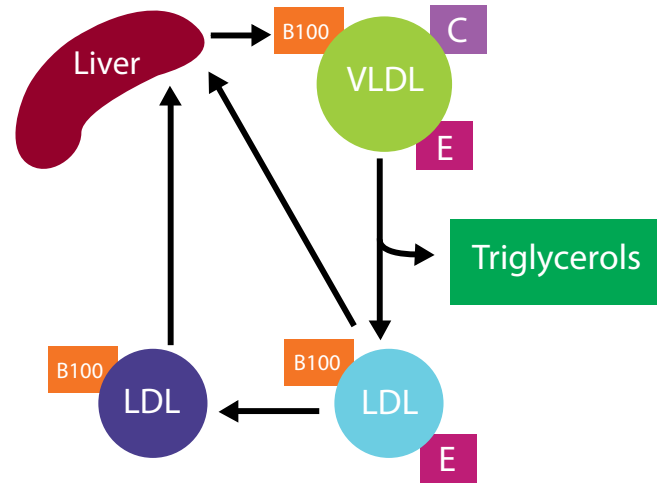
Cholesterol is essential for the function of many biological processes including maintenance of cell membranes, production of vitamin D and hormones, and formation of cell connections in the brain.

However, elevated levels of cholesterol in the bloodstream can have serious consequences.

Cholesterol accumulation is known to cause atherosclerosis, the leading cause of death in many developed countries. Cholesterol homeostasis is maintained by metabolism of lipoproteins.

Lipoprotein metabolism is divided into two pathways; exogenous, describing the actions of dietary lipids, and endogenous, which describes the activity of lipoproteins originating in the liver. In the exogenous pathway, dietary lipids are assembled with apolipoprotein B-48 into chylomicrons. In the bloodstream, chylomicrons ultimately activate the enzyme lipoprotein lipase (LPL), which catalyzes the release of glycerol and fatty acids for use/storage by peripheral adipose and muscle tissues. In the endogenous pathway, triacylglycerol and cholesterol are assembled with apolipoprotein B-100 to form VLDL particles which are

released into the bloodstream. VLDL also ultimately activates LPL which then hydrolyzes VLDL, leaving behind low density lipoproteins (LDLs) which have high cholesterol content.



Catalog#	Product	Host	Type	Application	Species
NB120-21490	ACAT2 (AT2.G7)	Mouse	Monoclonal	ELISA, WB	Hu
H00000039-D01P	ACAT2	Rabbit	Polyclonal	ELISA, WB	Hu
H00000039-A01	ACAT2	Mouse	Polyclonal	ELISA, WB	Hu
H00000350-B01	APOH	Mouse	Polyclonal	ELISA, WB	Hu
H00000350-D01P	APOH	Rabbit	Polyclonal	ELISA, WB	Hu
H00000350-B01P	APOH	Mouse	Polyclonal	ELISA, WB	Hu
H00000350-M01	APOH (3F10)	Mouse	Monoclonal	WB	Hu
H00000350-A01	APOH	Mouse	Polyclonal	ELISA, WB	Hu
NB100-91732	Cytochrome C	Rabbit	Polyclonal	ELISA, IHC, WB	Hu, Mu, Rt
NB100-75165	Cytochrome C	Chicken	Polyclonal	WB	Hu
NB100-78345	Cytochrome C (6H2.B4)	Mouse	Monoclonal	FACS, IF, IP, ICC	Mu, Rt, Hu
NB100-78346	Cytochrome C (6H2.B4), Biotin	Mouse	Monoclonal	FACS, ICC	Mu, Rt, Hu
NB100-78347	Cytochrome C (6H2.B4), FITC	Mouse	Monoclonal	FACS, ICC	Mu, Rt, Hu
NB400-111	Endothelial Lipase	Rabbit	Polyclonal	WB	Hu
NB400-118	Endothelial Lipase	Rabbit	Polyclonal	WB	Hu
NB110-60930	Endothelial Lipase	Rabbit	Polyclonal	WB	Hu, Mu
NBP1-05031	Endothelial Lipase	Goat	Polyclonal	ELISA, WB	Hu
H00009388-B01	Endothelial Lipase	Mouse	Polyclonal	ELISA, WB	Hu
H00009388-D01P	Endothelial Lipase	Rabbit	Polyclonal	ELISA, WB	Hu
H00009388-M02	Endothelial Lipase (1E11)	Mouse	Monoclonal	ELISA, WB	Hu
H00009388-A01	Endothelial Lipase	Mouse	Polyclonal	ELISA, WB	Hu
NB120-8314	FABP (10-E1)	Mouse	Monoclonal	ELISA	Hu
NB200-434	FABP (6B6)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-57588	FABP (1E12)	Mouse	Monoclonal	ELISA	Hu
NB100-75621	FABP	Chicken	Polyclonal	WB	Hu, Mu, Rt
NBP1-04290	FABP1 (2G4)	Mouse	Monoclonal	ELISA, IHC, WB	Hu

Cytochrome C Antibody NB100-91732



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

Immunohistochemical analysis of colon carcinoma tissue using NB100-91732.

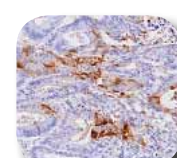
Endothelial Lipase Antibody NB110-60930



Species: Hu, Mu
Applications: WB

Western blot analysis of LIPG in liver lysate using NB110-60930. Lane 1: human liver Lane 2: mouse liver

FABP1 (2G4) Antibody NBP1-04290



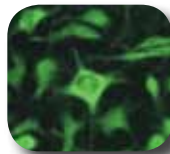
Species: Hu
Applications: ELISA, IHC, WB

Immunohistochemical analysis of human colon cancer tissue using NBP1-04290.

Lipoprotein Metabolism/Cholesterol Homeostasis

Catalog#	Product	Host	Type	Application	Species
H00002168-B01	FABP1	Mouse	Polyclonal	ELISA, WB	Hu
NB100-59746	FABP2	Goat	Polyclonal	ELISA, IHC-P, WB	Hu, Mu, Ca
NB400-107	LCAT	Rabbit	Polyclonal	ELISA, WB	Hu
NBP1-05950	LCAT	Rabbit	Polyclonal	WB	Hu, Mu
NB110-57158	LCAT (EPR1384Y)	Rabbit	Monoclonal	FACS, IHC, IP, WB, ICC	Hu
H00003931-A01	LCAT	Mouse	Polyclonal	ELISA, WB	Hu
NBP1-06709	LDL Receptor	Rabbit	Polyclonal	WB	Hu, Mu, Mk
NB110-57162	LDL Receptor (EP1553Y)	Rabbit	Monoclonal	WB, ICC, FACS, IHC, IP	Hu, Mu, Rt
NB300-338	LDL Receptor	Chicken	Polyclonal	WB	Hu, Mu, Rt
NB110-58748	LOX5	Rabbit	Polyclonal	WB	Ha, Hu, Mu
NB110-58749	LOX5	Rabbit	Polyclonal	WB	Rb, Hu, Mu, Rt, Bv
NB110-57150	LPIN1	Rabbit	Polyclonal	WB, IHC-P	Mu, Hu, Rt
NB110-57151	LPIN1	Rabbit	Polyclonal	WB	Mu, Hu, Rt
NB100-1521	LPIN1	Goat	Polyclonal	ELISA, WB	Hu
H00023175-M03	LPIN1 (3D9)	Mouse	Monoclonal	ELISA, WB	Hu
NB300-959	PCSK9	Goat	Polyclonal	ELISA, WB	Hu
NBP1-04676	PGC1 alpha	Rabbit	Polyclonal	WB	Ca, Hu, Mu, Mk, Rt, Eq
NB100-60955	PGC1 alpha	Goat	Polyclonal	ELISA, WB, IHC-P	Rt, Hu, Mu, Ca
NB100-2215	SREBP1	Rabbit	Polyclonal	WB	Ha, Mu, Po, Rt
NB100-60545	SREBP1	Rabbit	Polyclonal	WB	Hu, Mu, Rt, Ha
NB100-74542	SREBP1	Rabbit	Polyclonal	WB	Mu, Rt
NB110-68193	VLDL Receptor (B047M)	Mouse	Monoclonal	ELISA, WB	Hu
NB110-68194	VLDL Receptor (B046M)	Mouse	Monoclonal	ELISA	Hu
NB110-68195	VLDL Receptor (B045M)	Mouse	Monoclonal	ELISA, WB	Hu

LCAT (EPR1384Y) Antibody NB110-57158



Immuno-fluorescent staining of HeLa cells using NB110-57158.

Species: Hu

Applications: FACS, IHC, IP, WB, ICC

LOX5 Antibody NB110-58749



Western blot analysis of LOX5 in human peripheral leukocytes using NB110-58749.

Species: Rb, Hu, Mu, Rt, Bv

Applications: WB

PGC1 alpha Antibody NBP1-04676



Western blot analysis of PGC1 alpha in human liver using NBP1-04676.

Species: Ca, Hu, Mu, Mk, Rt, Eq

Applications: WB

Featured Lipid and Metabolism Antibodies

CD36

Aliases: FAT, Platelet glycoprotein 4

Research Area: Scavenger Receptors

CD36 is a member of the class B scavenger receptor family of integral membrane proteins found on the surface of many cell types. CD36 is found preferentially on lipid rafts, which facilitate associations between the receptor and signaling and adapter molecules. The receptor preferentially binds

collagen, thrombospondin, anionic phospholipids and oxidized LDL. It directly mediates cyto-adherence of plasmodium falciparum parasitized erythrocytes, binds long-chain fatty acids, and has a putative role as a regulator of fatty acid transport and as a cell adhesion molecule. CD36 has been implicated in glucose intolerance, atherosclerosis, hypertension, diabetes, and Alzheimer's disease.

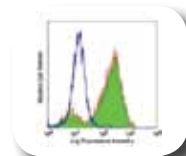
CD36 Antibody NB400-144



Immuno-histochemical analysis of human adipocytes using NB400-144.

Species: Hu, Bv, Mk, Mu, Rt, Ha
Applications: IHC, WB

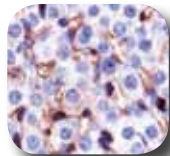
CD36 (HM36) Antibody NB100-77403



Flow cytometric analysis of thioglycolate-elicited BALB/c mouse peritoneal macrophages stained using NB100-77403.

Species: Mu
Applications: FACS

CD36 (D-2712) Antibody NB110-59724



Immuno-histochemical analysis of CD36 in mouse liver using NB110-59724.

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

Featured Lipid and Metabolism Antibodies

ACAT1

Research Areas: Lipoprotein Metabolism/Cholesterol Homeostasis

ACAT1 is a 50kDa protein that catalyzes the formation of intracellular cholesterol esters in a variety of tissues, including adult human liver, adrenal glands and kidneys. In macrophages, ACAT1 influences the efflux of cellular and lipoprotein-derived cholesterol. During lipid processing, the ACAT1 enzyme carries out the last step in ketolysis, converting acetoacetyl-CoA into two molecules of acetyl-CoA.

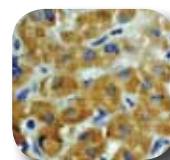
**ACAT1 Antibody
H00006646-B01**



Species: Hu
Applications: ELISA, IF, WB

Immuno-
fluorescence of
ACAT1 on HeLa
cells using
H00006646-B01.

**ACAT1 Antibody
NB100-79888**



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

Immuno-
histochemical
analysis of human
liver using
NB100-79888.

**PPAR-alpha Antibody
NBP1-19428**



Western blot
analysis of extracts
from NIH/3T3 cells
using NBP1-19428.

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

PPAR-alpha

Research Areas: Metabolism and Cancer

Peroxisome proliferators are nongenotoxic carcinogens which exert their effects on cells through interaction with Peroxisome Proliferator Activated Receptors (PPARs), members of the nuclear hormone receptor family. PPAR-alpha is activated by free fatty acids including linoleic, arachidonic, and oleic acids. It is expressed mainly in skeletal muscle, heart, liver and kidney tissue and is thought to regulate many genes involved in the beta-oxidation of fatty acids. Activation of PPAR-alpha in rat liver has been shown to suppress hepatocyte apoptosis.

SOX13

Research Areas: Obesity, Diabetes, and Insulin Resistance

Members of the SOX family of transcription factors play key roles in determining cell fate during organ development. SOX13 belongs to the class D subgroup of SOX transcription factors, which contains a leucine zipper motif and a glutamine-rich region. SOX13 is a Type 1 diabetes autoantigen, also known as islet cell antigen 12 (ICA12). In humans, SOX13 has been localized to the islets of Langerhans.

**SOX13 Antibody
H00009580-B01**



Species: Hu
Applications: ELISA, IF, WB

Immuno-
fluorescence of
SOX13 on HeLa
cells using
H00009580-B01.

Other Lipid and Metabolism Antibodies

Beta Amylase	Elav-type RNA-binding protein	Phosphotyrosine
CD34	ELOVL4	PMP70
CD98	FABP	PRAS40 [Thr246]
CETP	FABP (liver)	Prostaglandin I2 (5,6 dihydro)
Cholesterol Oxidase	Gamma Glutamylcysteine Synthetase	PTEN
COX-IV	IL-18 Binding Protein	PTEN [Ser370]
Cysteinyl Leukotriene Receptor 1	LDL	Sarcosine Oxidase
Cytochrome C	LDL Receptor	Sphingolipid Receptor Edg1
Cytochrome P450 1A1	Lipid A	Sphingolipid Receptor Edg3
Cytochrome P450 1A2	LRP 5 + 6	Sphingolipid Receptor Edg6
Cytochrome P450 2A6	MARCKS [Ser152/Ser156]	Sphingolipid Receptor Edg8
Cytochrome P450 2C11	MLN 64	
Cytochrome P450 3A4	Mutarotase	
Cytochrome P450 4A	Phospholipase C gamma-1 [Tyr783]	



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