



CATALOG OF ANTIBODIES FOR

# LIPID AND METABOLISM RESEARCH



# Table of Contents

ABC Transporter Antibodies ..... 2  
Scavenger Receptor Antibodies .. 2  
Metabolism and Neurodegeneration Antibodies ..... 3-4  
Lipid Droplet Antibodies ..... 5  
Unfolded Protein Response Antibodies ..... 6  
Obesity, Diabetes and Insulin Resistance ..... 7-8  
Metabolism and Cancer ..... 9-10  
Lipoprotein Metabolism/Cholesterol Homeostasis.. 11-12  
Featured Antibodies ..... 12-13  
In the News ..... 14

## 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** - Radioimmunoassay
- 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.

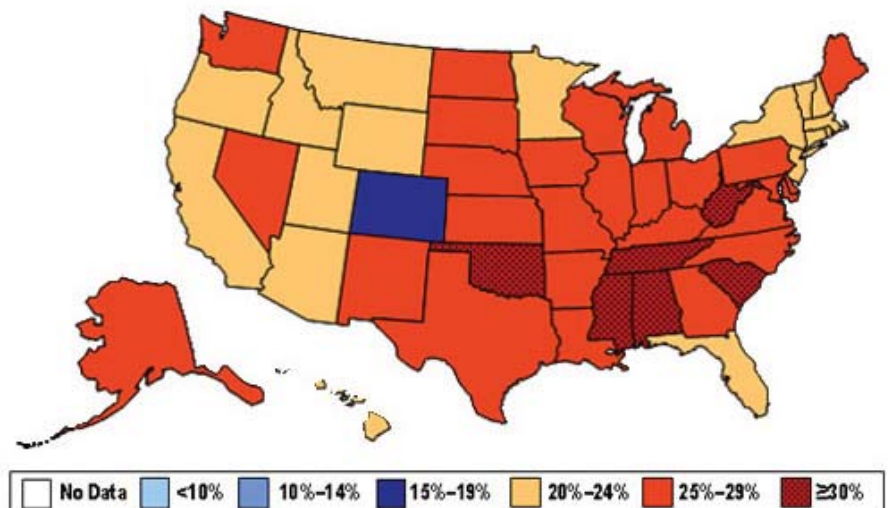
Diabetics are up to four times more likely to suffer a stroke or have heart disease than non-diabetics. Diabetes is the leading cause of blindness and kidney failure in adults and is responsible for 60% of all lower extremity amputations. The development of Type 2 diabetes is intimately associated with 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

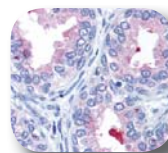
# ABC Transporter Antibodies

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
NBP1-18886	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
NBP1-00138	ABCC8	Goat	Polyclonal	ELISA, WB	Hu, Mu, Rt, Ca
NB100-96913	ABCD1	Goat	Polyclonal	ELISA, WB	Hu
NBP1-20871	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
NBP1-20874	ABCG4	Goat	Polyclonal	ELISA	Hu, Mu, Rt, Ca

## ABCA1 Antibody NB400-105

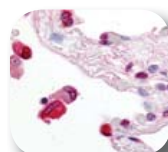


Immunohistochemical analysis of prostate epithelium using NB400-105.

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

SAMPLE SIZES AVAILABLE

# 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

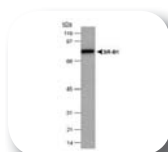
with high affinity and mediates selective uptake of HDL cholesteryl ester. SR-B1 is expressed primarily in liver and nonplacental steroidogenic tissues, and mediates selective cholesterol uptake by a distinct mechanism.

Catalog #	Product	Host	Type	Application	Species
NB400-104	SR-B1	Rabbit	Polyclonal	IP, WB, IHC	Mu, Rt, Ha, Hu
NB400-101	SR-B1	Rabbit	Polyclonal	IP, WB, FACS	Ha, Mu, Rt, Hu
NB400-113	SR-B1	Rabbit	Polyclonal	IP	Hu, Mu
NB400-131	SR-B1	Goat	Polyclonal	IF, WB, ICC	Mu, Mi, Rt, Ha
NB400-134	SR-B1/BII	Rabbit	Polyclonal	IF, WB, IHC	Mu
NB400-102	SR-BII	Rabbit	Polyclonal	IF, WB, IHC-P	Bv, Ha, Hu, Mu, Rt

SAMPLE SIZES AVAILABLE

**Can't Decide?  
Try the SR-B1  
SuperNovus Pack  
Catalog Number:  
NB100-908  
Includes:  
NB400-101  
NB400-104  
NB400-131**

## SR-B1 Antibody NB400-101



Western blot analysis of SR-B1 in mouse liver lysate using NB400-101.

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

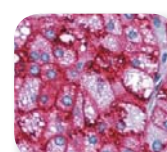
## SR-B1 Antibody NB400-131



Western blot analysis of SR-B1 in mouse liver lysate using NB400-131.

Species: Mu, Mi, Rt, Ha  
Applications: IF, WB, ICC

## SR-B1 Antibody NB400-104



Immunohistochemical analysis of the adrenal cortex using NB400-104.

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

# 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

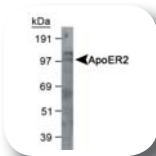
## Apo A1 (EP1368Y) Antibody NB110-55465



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

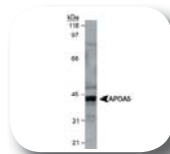
## Apo ER2 Antibody NB100-2217



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

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

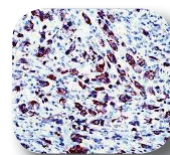
## Apo A5 (1G5G9) Antibody NB400-139



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

## Abnova, Acris, biosensis, Innova

Novus distributes for these companies:



Innova Biosciences























