

# NTR3 Rabbit pAb

NTR3 Rabbit pAb Catalog # AP58418

### **Product Information**

**Application** WB, IHC-P, IHC-F, IF

Primary Accession <u>Q99523</u>

**Reactivity** Pig, Mouse, Dog, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 92068
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human Sortilin/NTR3/Gp95

Epitope Specificity 731-831/831

**Isotype** IgG

**Purity** affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Membrane; Single-pass type I membraneprotein. Endoplasmic reticulum membrane; Single-pass type Imembrane protein (Potential). Endosome membrane; Single-pass type Imembrane protein (Potential). Golgi apparatus, Golgi stackmembrane; Single-pass type I membrane protein (Potential). Lysosomemembrane; Single-pass type I membrane protein (Potential). Nucleusmembrane; Single-pass type I membrane protein (Potential). Cellmembrane; Single-pass type I membrane protein; Extracellular side.Lysosome membrane; Single-pass type I membrane protein (Potential). Note=Localized to membranes of the endoplasmic

reticulum, endosomes, Golgi stack, lysosomes and nucleus. A small fraction ofthe protein is also localized to the plasma membrane. May also befound in SLC2A4/GLUT4 storage vesicles (GSVs) in adipocytes. Localization to the

plasma membrane in adipocytes may be enhancedby insulin.

**SIMILARITY** Belongs to the VPS10-related sortilin family. SORT1subfamily. Contains 9 BNR

epeats.

**SUBUNIT** Interacts with LPL and SLC2A4 (By similarity). Interacts with the cytosolic

adapter proteins GGA1 and GGA2. Interacts withnumerous ligands including the receptor-associated proteinLRPAP1/RAP, GM2A, NTS and PSAP. Forms a complex with NGFR whichbinds specifically to the precursor forms of NGFB

(proNGFB) andBDNF (proBDNF).

Post-translational modifications DISEASE

The N-terminal propeptide is cleaved by furin and possiblyother homologous

proteases.

Note=A common polymorphism located in a non-coding regionbetween CELSR2 and PSRC1 alters a CEBP transcription factor bindingsite and is responsible for changes in hepatic expression of SORT1.Altered SORT1 expression in liver affects low density lipoproteincholesterol levels in plasma

and is associated with susceptibilityto myocardial infarction.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Functions as a sorting receptor in the Golgi compartment and as a clearance

receptor on the cell surface. Required for protein transport from the Golgi

apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi. Tissue specificity: Expressed at high levels in brain, spinal cord, heart, skeletal muscle, thyroid, placenta and testis. Expressed at lower levels in lymphoid organs, kidney, colon and liver.

### **Additional Information**

**Gene ID** 6272

Other Names Sortilin, 100 kDa NT receptor, Glycoprotein 95, Gp95, Neurotensin receptor 3,

NT3, NTR3, SORT1 (HGNC:11186)

**Target/Specificity** Expressed at high levels in brain, spinalcord, heart, skeletal muscle, thyroid,

placenta and testis. Expressed at lower levels in lymphoid organs, kidney,

colon andliver.

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name SORT1 ( HGNC:11186)

**Function** Functions as a sorting receptor in the Golgi compartment and as a clearance receptor on the cell surface. Required for protein transport from the Golgi

apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Lysosomal proteins bind specifically to the receptor in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex (PubMed: 16787399). The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer. Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi.

#### **Cellular Location**

Golgi apparatus, Golgi stack membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single- pass type I membrane protein. Nucleus membrane; Single-pass type I membrane protein. Cell membrane; Single-pass type I membrane protein; Extracellular side Lysosome membrane; Single-pass type I membrane protein. Note=Localized to membranes of the endoplasmic reticulum, endosomes, Golgi stack, lysosomes and nucleus. A small fraction of the protein is also localized to the plasma membrane. May also be found in SLC2A4/GLUT4 storage vesicles (GSVs) in adipocytes Localization to the plasma membrane in adipocytes may be enhanced by insulin

#### **Tissue Location**

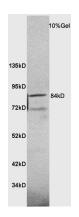
Expressed in brain and prostate (at protein level). Expressed at high levels in brain, spinal cord, heart, skeletal muscle, thyroid, placenta and testis. Expressed at lower levels in lymphoid organs, kidney, colon and liver.

## **Background**

Functions as a sorting receptor in the Golgi compartment and as a clearance receptor on the cell surface. Required for protein transport from the Golgi apparatus to the lysosomes by a pathway that is independent of the mannose-6-phosphate receptor (M6PR). Also required for protein transport from the Golgi apparatus to the endosomes. Promotes neuronal apoptosis by mediating endocytosis of the proapoptotic precursor forms of BDNF (proBDNF) and NGFB (proNGFB). Also acts as a receptor for neurotensin. May promote mineralization of the extracellular matrix during osteogenic differentiation by scavenging extracellular LPL. Probably required in adipocytes for the formation of specialized storage vesicles containing the glucose transporter SLC2A4/GLUT4 (GLUT4 storage vesicles, or GSVs). These vesicles provide a stable pool of SLC2A4 and confer increased responsiveness to insulin. May also mediate transport from the endoplasmic reticulum to the Golgi.

Tissue specificity: Expressed at high levels in brain, spinal cord, heart, skeletal muscle, thyroid, placenta and testis. Expressed at lower levels in lymphoid organs, kidney, colon and liver.

# **Images**

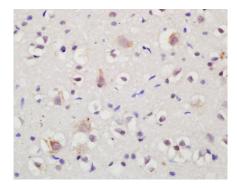


Sample: Brain (Rat) Lysate at 40 ug

Primary: Anti-NTR3 (AP58418) at 1/300 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG

(AP58418-HRP) at 1/5000 dilution

Predicted band size: 84 kD Observed band size: 84 kD



Tissue/cell: mouse brain tissue; 4%
Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-NTR3 Polyclonal Antibody, Unconjugated(AP58418) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.