

**NTR3 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58418**

**Specification**

**NTR3 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">Q99523</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	84 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Sortilin/NTR3/Gp95
Epitope Specificity	731-831/831
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single-pass type I membraneprotein. Endoplasmic reticulum membrane; Single-pass type I membrane protein (Potential). Endosome membrane; Single-pass type I membrane 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 repeats.
SUBUNIT	Interacts with LPL and SLC2A4 (By

Post-translational modifications

DISEASE

Important Note

similarity). Interacts with the cytosolic adapter proteins GGA1 and GGA2. Interacts with numerous ligands including the receptor-associated protein LRPAP1/RAP, GM2A, NTS and PSAP. Forms a complex with NGFR which binds specifically to the precursor forms of NGFB (proNGFB) and BDNF (proBDNF).

The N-terminal propeptide is cleaved by furin and possibly other homologous proteases.

**Note**—A common polymorphism located in a non-coding region between CELSR2 and PSRC1 alters a CEBP transcription factor binding site and is responsible for changes in hepatic expression of SORT1. Altered SORT1 expression in liver affects low density lipoprotein cholesterol levels in plasma and is associated with susceptibility to myocardial infarction. 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.

### NTR3 Polyclonal Antibody - Additional Information

**Gene ID** 6272

#### Other Names

Sortilin, 100 kDa NT receptor, Glycoprotein 95, Gp95, Neurotensin receptor 3, NT3, NTR3, SORT1 ([HGNC:11186](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11186))

#### Target/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.

#### Dilution

**WB** ~ 1:1000  
**IHC-P** ~ N/A  
**IHC-F** ~ N/A

="dilution\_IF">IF~1:50~200</span><br \><span class ="dilution\_E">E~N/A</span>

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**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.

**NTR3 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/16787399" target="\_blank">16787399</a>). 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.

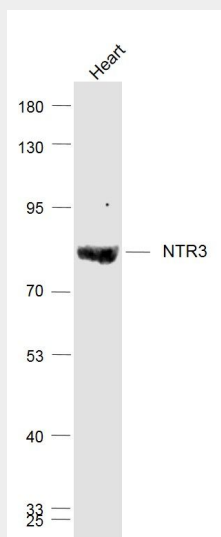
**NTR3 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### NTR3 Polyclonal Antibody - Images



#### Sample:

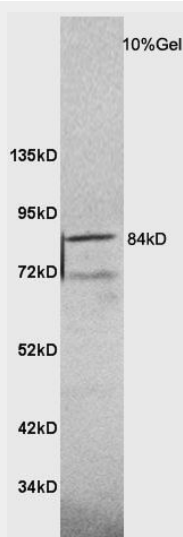
Heart (Mouse) Lysate at 40 ug

Primary: Anti-NTR3 (bs-6329R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 84 kD

Observed band size: 84 kD



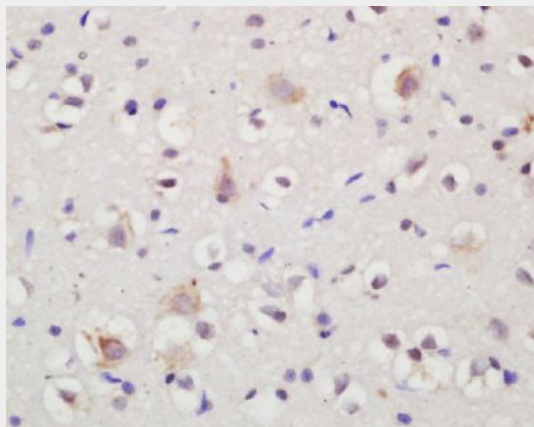
#### Sample: Brain (Rat) Lysate at 40 ug

Primary: Anti-NTR3 (bs-6329R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution

Predicted band size: 84 kD

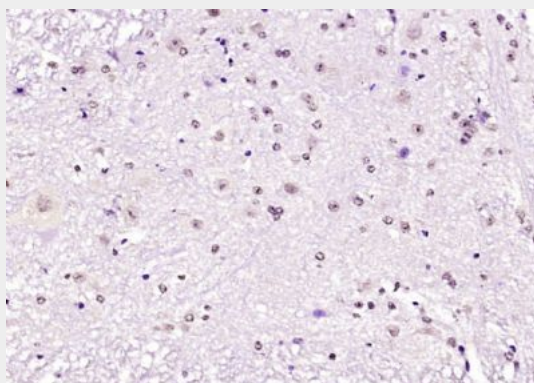
Observed band size: 84 kD



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(bs-6329R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NTR3) Polyclonal Antibody, Unconjugated (bs-6329R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.