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NETO1 Antibody
Catalog # ASC11370

Specification

NETO1 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q8TDF5
Other Accession	NP_694821, 20452470
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**NETO1 antibody can be used for detection of NETO1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

NETO1 Antibody - Additional Information

Gene ID **81832**

Target/Specificity
NETO1; NETO1 antibody is predicted to not cross-react with other NETO protein family members.

Reconstitution & Storage
NETO1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
NETO1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NETO1 Antibody - Protein Information

Name NETO1

Synonyms BTCL1

Function
Involved in the development and/or maintenance of neuronal circuitry. Accessory subunit of the neuronal N-methyl-D-aspartate receptor (NMDAR) critical for maintaining the abundance of GRIN2A- containing NMDARs in the postsynaptic density. Regulates long-term NMDA receptor-dependent synaptic plasticity and cognition, at least in the context of spatial learning and memory (By similarity).

Cellular Location
[Isoform 2]: Cell membrane; Single- pass type I membrane protein. Postsynaptic density

membrane. Note=Component of the postsynaptic density (PSD) of excitatory synapses. [Isoform 1]: Secreted.

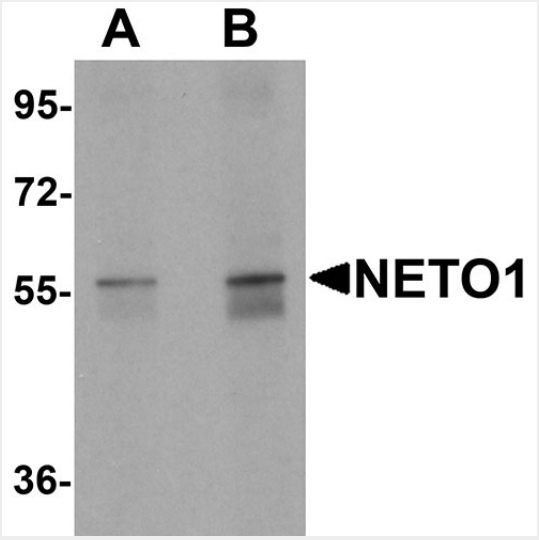
Tissue Location
Isoform 1 and isoform 2 are retina-specific. Isoform 3 is found in retina as well as at lower levels in adult and fetal brain.

NETO1 Antibody - Protocols

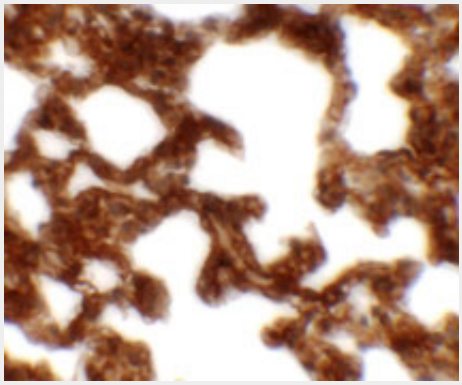
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NETO1 Antibody - Images



Western blot analysis of NETO1 in human lung tissue lysate with NETO1 antibody at (A) 1 and (B) 2 µg/mL.



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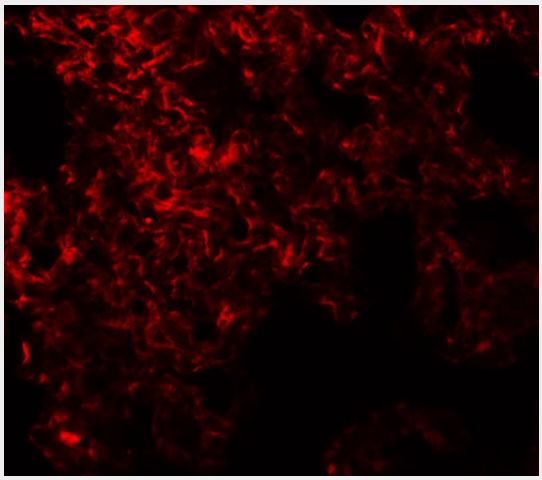
Immunohistochemistry of NETO1 in rat lung tissue with NETO1 antibody at 2.5 µg/mL.



Immunofluorescence of NETO1 in rat lung tissue with NETO1 antibody at 20 µg/mL.

NETO1 Antibody - Background

NETO1 Antibody: Neuropilin and tolloid-like protein 1 (NETO1) is involved in the development and/or maintenance of neuronal circuitry. It is a type I transmembrane protein that is expressed in the brain and retina. NETO1 contains one LDL-receptor class A domain and two CUB domains and is either membrane-bound or secreted. It has three alternatively spliced isoforms, the first two of which are retina-specific and the third of which is found in both retina and brain tissue. Furthermore, as an accessory subunit of the neuronal N-methyl-D-aspartate receptor (NMDAR), it regulates long-term NMDA receptor-dependent synaptic plasticity and cognition, at least in the context of spatial learning and memory.

NETO1 Antibody - References

Michishita M, Ikeda T, Nakashiba T, et al. A novel gene, Btcl1, encoding CUB and LDLa domains is expressed in restricted areas of mouse brain. Biochem. Biophys. Res. Commun. 2003; 306:680-6.
Stöhr H, Berger C, Fröhlich S, et al. A novel gene encoding a putative transmembrane protein with two extracellular CUB domains and a low-density lipoprotein class A module: isolation of alternatively spliced isoforms in retina and brain. Gene 2002; 286:223-31
Straub C, Hunt DL, Yamasaki M, et al. Distinct functions of kainate receptors in the brain are determined by the auxiliary subunit Neto1. Nat. Neurosci. 2011; 14:866-73.
Ng D, Pitcher GM, Szilard RK, et al. Neto1 is a novel CUB-domain NMDA receptor-interacting protein required for synaptic plasticity and learning. PLoS Biol. 2009; 7:e41