

# Goat Anti-Neurexin 1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1720a

#### Specification

# **Goat Anti-Neurexin 1 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW

WB, E <u>P58400</u> NP\_620072, 9378, 18189 (mouse), 60391 (rat) Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 50424

## Goat Anti-Neurexin 1 Antibody - Additional Information

Gene ID 9378

Other Names Neurexin-1-beta, Neurexin I-beta, NRXN1

Dilution WB~~1:1000 E~~N/A

**Format** 0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Neurexin 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Goat Anti-Neurexin 1 Antibody - Protein Information**

Name NRXN1 (HGNC:8008)

Function

Neuronal cell surface protein involved in cell recognition and cell adhesion by forming intracellular junctions through binding to neuroligins (By similarity). Plays a role in formation of synaptic



junctions (By similarity). Functions as part of a trans-synaptic complex by binding to cerebellins and postsynaptic GRID1. This interaction helps regulate the activity of NMDA and AMPA receptors at hippocampal synapses without affecting synapse formation. NRXN1B-CBLN2- GRID1 complex transduce presynaptic signals into postsynaptic NMDAR response (By similarity).

#### **Cellular Location**

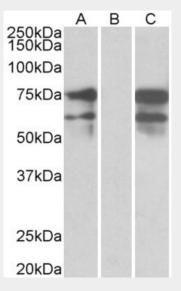
Presynaptic cell membrane {ECO:0000250|UniProtKB:P0DI97}; Single-pass type I membrane protein

#### Goat Anti-Neurexin 1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **Goat Anti-Neurexin 1 Antibody - Images**



HEK293 lysate (10ug protein in RIPA buffer) overexpressing Human NRXN1 with DYKDDDDK tag probed with AF1720a(0.5ug/ml) in Lane A and probed with anti- DYKDDDDK Tag (1/3000) in lane C. Mock-transfected HEK293 probed with AF1720a(1mg/ml) in Lane B. Primary incubations were for 1 hour. Detected by chemiluminescence.

#### Goat Anti-Neurexin 1 Antibody - Background

Neurexins function in the vertebrate nervous system as cell adhesion molecules and receptors. Two neurexin genes are among the largest known in human (NRXN1 and NRXN3). By using alternate promoters, splice sites and exons, predictions of hundreds or even thousands of distinct mRNAs have been made. Most transcripts use the upstream promoter and encode alpha-neurexin isoforms; fewer transcripts are produced from the downstream promoter and encode beta-neurexin isoforms. Alpha-neurexins contain epidermal growth factor-like (EGF-like) sequences and laminin G



domains, and they interact with neurexophilins. Beta-neurexins lack EGF-like sequences and contain fewer laminin G domains than alpha-neurexins. The RefSeq Project has decided to create only a few representative transcript variants of the multitude that are possible.

## Goat Anti-Neurexin 1 Antibody - References

Structural insights into the exquisite selectivity of neurexin/neuroligin synaptic interactions. Leone P, et al. EMBO J, 2010 Jul 21. PMID 20543817.

Deletions of NRXN1 (neurexin-1) predispose to a wide spectrum of developmental disorders. Ching MS, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jun 5. PMID 20468056.

TCF4, schizophrenia, and Pitt-Hopkins Syndrome. Blake DJ, et al. Schizophr Bull, 2010 May. PMID 20421335.

Association between neurexin 1 (NRXN1) polymorphisms and the smoking behavior of elderly Japanese. Sato N, et al. Psychiatr Genet, 2010 Jun. PMID 20414139.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.