

Anti-Neurexin 1/NRXN1 Antibody Picoband™

Catalog Number: A01490-1

About NRXN1

Neurexin-1-alpha is a protein that in humans is encoded by the NRXN1 gene. This gene encodes a single-pass type I membrane protein that belongs to the neurexin family. Neurexins are cell-surface receptors that bind neuroligins to form Ca²⁺-dependent neurexin/neuroligin complexes at synapses in the central nervous system. This complex is required for efficient neurotransmission and is involved in the formation of synaptic contacts. Three members of this gene family have been studied in detail and are estimated to generate over 3,000 variants through the use of two alternative promoters (alpha and beta) and extensive alternative splicing in each family member. Recently, a third promoter (gamma) was identified for this gene in the 3' region. Mutations in this gene are associated with Pitt-Hopkins-like syndrome-2 and may contribute to susceptibility to schizophrenia.

Overview

Product Name	Anti-Neurexin 1/NRXN1 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Neurexin 1/NRXN1 Antibody Picoband™ catalog # A01490-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P58400

Technical Details

Immunogen	E. coli-derived human Neurexin 1 recombinant protein (Position: D141-E294).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used: Western blot, 0.25-0.5 ug/ml, Human Direct ELISA, 0.1-0.5 ug/ml, Human</p>

Anti-Neurexin 1/NRXN1 Antibody Picoband™ (A01490-1) Images

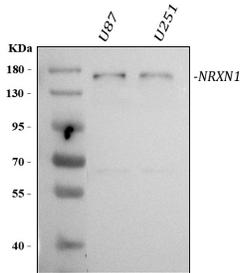


Figure 1. Western blot analysis of Neurexin 1/NRXN1 using anti-Neurexin 1/NRXN1 antibody (A01490-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U87 whole cell lysates,
Lane 2: human U251 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Neurexin 1/NRXN1 antigen affinity purified polyclonal antibody (Catalog # A01490-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Neurexin 1/NRXN1 at approximately 160-170 kDa. The expected band size for Neurexin 1/NRXN1 is at 50 kDa.

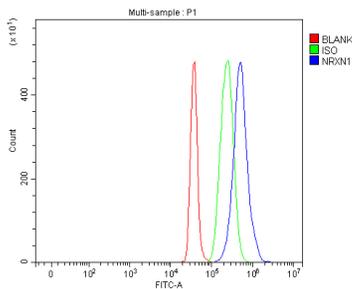


Figure 2. Flow Cytometry analysis of SH-SY5Y cells using anti-Neurexin 1/NRXN1 antibody (A01490-1).

Overlay histogram showing SH-SY5Y cells stained with A01490-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Neurexin 1/NRXN1 Antibody (A01490-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Neurexin 1/NRXN1 Antibody™