Human Neurexin-3-beta / NRXN3 Protein (Fc Tag)

Catalog Number: **11843-H02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

C14orf60

Protein Construction:

A DNA sequence encoding the human NRXN3 isoform 2 (NP_620426.2) extracellular domain (Met 1-Thr 357) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by the ability of the immobilized protein to support the adhesion of C6 Rat brain glial cells . When 5 x 10^4 cells/well are added to NRXN3 coated plates (0.8 μg/ml and 100 μl/well), >30 % will adhere specifically after 60 minutes at 37℃.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ser 36

Molecular Mass:

The secreted recombinant human NRXN3/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 563 amino acids and predictes a molecular mass of 61.6 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh NRXN3/Fc monomer is approximately 75-85 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

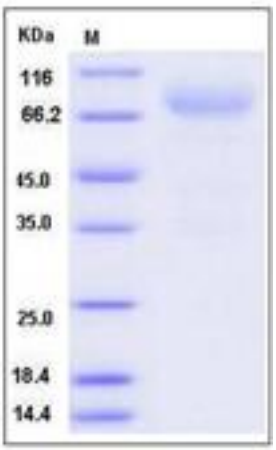
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Neurexin-3-beta, also known as Neurexin III-beta and NRXN3, is a single-pass type I membrane protein which belongs to the neurexin family. It contains one laminin G-like domain. It is a neuronal cell surface protein that may be involved in cell recognition and cell adhesion. Neurexins are a family of proteins that function in the vertebrate nervous system as cell adhesion molecules and receptors. They are encoded by several unlinked genes of which two, NRXN1 and NRXN3, are among the largest known human genes. Three of the genes (NRXN1, NRXN2, NRXN3) utilize two alternate promoters and include numerous alternatively spliced exons to generate thousands of distinct mRNA transcripts and protein isoforms. The majority of transcripts are produced from the upstream promoter and encode alpha-neurexin isoforms; a much smaller number of transcripts are produced from the downstream promoter and encode beta-neurexin isoforms. The alpha-neurexins contain EGF-like sequences and laminin G domains, and have been shown to interact with neurexophilins. The beta-neurexins lack EGF-like sequences and contain fewer laminin G domains than alpha-neurexins. NRXN3 have been linked to genetic predisposition towards a number of conditions such as alcohol or drug addiction, or obesity.

References

1.Occhi G. et al., 2002, Biochem. Biophys. Res. Commun. 298:151-5.
2.Rowen L, et al., 2002, Genomics. 79 (4): 587-97.
3.Olsen J.V. et al., 2006, Cell 127:635-48.