Rat Neurexophilin-1 / NXPH1 Protein (His Tag)

Catalog Number: **80047-R08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

NXPH1

Protein Construction:

A DNA sequence encoding the rat NXPH1 (Q63366-1) (Met 1-Gly 271) was expressed, fused with a polyhistidine tag at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

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: Ala 22

Molecular Mass:

The secreted recombinant rat NXPH1 comprises 261 amino acids and predicts a molecular mass of 30 kDa. The apparent molecular mass of the rat NXPH1 is approximately 45-50 kDa in SDS-PAGE under reducing conditions 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:

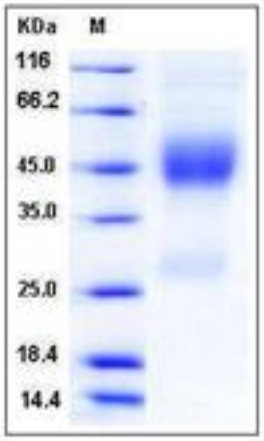
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Neurexophilin-1, or NXPH1 is a secreted glycoprotein, which belongs to the Neurexophilin family. The Neurexophilin family contain at least four genes and resembles a neuropeptide, suggesting a function as an endogenous ligand for alpha-neurexins. The mammalian brains contain four genes for neurexophilins the products of which share a common structure composed of five domains: an N-terminal signal peptide, a variable N-terminal domain, a highly conserved central domain that is N-glycosylated, a short linker region, and a conserved C-terminal domain that is cysteine-rich. Neurexophilin-1 constitutes a secreted cysteine-rich glycoprotein, forms a very tight complex with alpha neurexins, a group of proteins that promote adhesion between dendrites and axons. Neurexophilins 1 and 3 but not 4 (neurexophilin 2 is not expressed in rodents) bind to a single individual LNS domain, the second overall LNS domain in all three alpha-neurexins.

References

1.Missler M, *et al.* (1998) Neurexophilin binding to alpha-neurexins. A single LNS domain functions as an independently folding ligand-binding unit. J Biol Chem. 273(52): 34716-23. 2.Missler M, *et al.* (1998) Neurexophilins form a conserved family of neuropeptide-like glycoproteins. J Neurosci. 18(10): 3630-8. 3.Petrenko AG, *et al.* (1996) Structure and evolution of neurexophilin. J Neurosci. 16(14): 4360-9.