Recombinant Mouse Neurturin protein(His Tag)

Catalog Number:PKSM041514

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	Monocyte Chemotactic Protein-1;MCP-1;JE
Species	Mouse
Expression Host	E.coli
Sequence	Pro 96-Val 195
Accession	P97463
Calculated Molecular Weight	12.3 kDa
Observed molecular weight	11-17 kDa
Tag	N-His
Bioactivity	Measure by its ability to induce proliferation in SH-SY5Y cells.The ED_{50} for this effect is < 50 ng/mL.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Neurturin is a member of the GDNF family of ligands, which include glial cell-derived neurotrophic factor (GDNF), Neurturin, Persephin, and Artemin. Neurturin is expressed in both neuronal and nonneuronal tissues. Similarly to other TGFβ family proteins, Neurturin is synthesized as a precursor protein that is cleaved at the dibasic cleavage site (RXXR) to release the carboxyterminal domain. The carboxy terminal domain of Neurturin contains the characteristic seven conserved cysteine residues necessary for the formation of the cysteine-knot and the single interchain disulfide bond. Biologically active human Neurturin is a disulfide-linked homodimer of the carboxy-terminal 102 amino acid residues. Unlike other members of TGF-β family, bioactivities of all GDNF family ligands are mediated through a unique multicomponent receptor complex composed of high affinity ligand binding component (GFRα-1-GFRα-4) and a common signaling component (cRET receptor tyrosine kinase). Each member of the GDNF family ligands has its preferred binding protein. Neurturin preferentially binds to GFRα-2 but can also bind GFRα-1 at higher concentrations. It may play a role in regulating the development and maintenance of the central and peripheral nervous systems and as well as non neuronal systems.

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