

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived		
	Chicken Netrin-1 (Gly26 - Ala606) Accession # Q90922	DIEGRGGGSGGGSGGGGS	10-His tag
	N-terminus		C-terminus
N-terminal Sequence Analysis	Gly26		
Predicted Molecular Mass	66.3 kDa		

SPECIFICATIONS

SDS-PAGE	75-85 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. Immobilized rUNC5H2/Fc Chimera at 5 µg/mL (100 µL/well) can bind rcNetrin-1 with a linear range of 6-400 ng/mL.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 25 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Chicken Netrin-1 is the prototypical member of an ever-expanding, laminin-related family of axon-guidance molecules collectively referred to as netrins (*netr* is Sanskrit for "one who guides"). The molecule's cDNA encodes a 606 amino acid (aa) protein precursor that has structural similarity to the N-terminus of the B2 or γ-chain of laminin. It contains one 250 aa type VI globular domain, three type V (~55 aa) cysteine/glycine rich EGF repeats, and one unique 140 aa "C" domain that binds heparin. Chick Netrin-1 shares 78% aa identity with chicken Netrin-2 and 86% aa identity with mouse and human Netrin-1. Although only two chick netrins are known, the number of known mammalian netrins is increasing. Human and mouse Netrin-3/NTN-2L, and a mouse Netrin-4, that shares homology with the B1 or β-chain of laminin, have been reported. Cells reported to express Netrin-1 in the embryo include cells of the spinal cord floor plate and somite, cells of the ganglionic eminence, and cells of the floor plate of the met- and caudal mesencephalon. In the adult, neurons of the thalamus, neocortex, and hippocampus, plus Schwann cells, osteoclasts and osteoblasts all reportedly produce Netrin-1. The DCC (deleted in colorectal cancer) gene product as well as the UNC5 family of receptors and the adenosine A2b receptor have been proposed to be functional receptors for Netrin-1.

References:

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