

**DESCRIPTION**

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

**SPECIFICATIONS**

<b>SDS-PAGE</b>	75-85 kDa, reducing conditions
<b>Activity</b>	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.
<b>Endotoxin Level</b>	<1.0 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 100 µg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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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