

Active Recombinant Human Neurocan, His-tagged

Cat. No. NCAN-5691H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NCAN protein was expressed in CHO with a C-terminal 6-His tag. Glu23-Cys1321.
Species	Human
Source	CHO
Protein Length	23-1321 a.a.
Description	NCAN, also known as CSPG3 and 1D1, is a secreted chondroitin sulfate proteoglycan that is primarily expressed in the central nervous system. Human NCAN contains one Ig-like V-type domain, two Link domains, two EGF-like domains, one C-type lectin like domain, and one Sushi domain. It is an approximately 300 kDa molecule of which 66 kDa is chondroitin sulfate and 60 kDa is N- and O-linked glycosylation. Mature human NCAN shares 66% aa sequence identity with mature mouse and rat NCAN.
Form	Lyophilized from a 0.2 µm filtered solution in PBS.
N-terminal Sequence	Glu23
Molecular Weight	141.5 kDa
Activity	Measured by the ability of the immobilized protein to enhance the adhesion of H4 human neuroglioma cells. When 5 x 10 ⁴ cells per well are added to recombinant human NCAN coated plates, cell adhesion is enhanced in a dose

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	dependent manner. The ED50 for this effect is typically 50-200 ng/mL.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
SDS-PAGE	140-290kDa, reducing conditions.
Purity	>90%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Reconstitution	100 µg/mL in PBS
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 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.

GENE INFORMATION

Gene Name	NCAN neurocan [Homo sapiens]
Official Symbol	NCAN
Synonyms	NCAN; neurocan; CSPG3; FLJ44681; neurocan core protein; neurocan proteoglycan; chondroitin sulfate proteoglycan 3 (neurocan); NEUR; Chondroitin sulfate proteoglycan 3
Gene ID	1463
mRNA Refseq	NM_004386
Protein Refseq	NP_004377

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MIM	600826
UniProt ID	O14594
Chromosome Location	19p12
Pathway	Axon guidance; Developmental Biology; L1CAMinteractions; NCAM signaling for neurite out-growth; NCAM1 interactions;Syndecan-3-mediated signaling events
Function	binding; calcium ion binding; hyaluronicacid binding; sugar binding

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