



LD Biopharma, Inc.
7384 Trade Street, Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human NCAM2 Protein
Catalog Number: HRP-3649
Manufacturer: LD Biopharma, Inc. USA

Introduction

Human Neural Cell Adhesion Molecule 2 (NCAM2) gene encodes a receptor which play important roles in selective fasciculation and zone-to-zone projection of the primary olfactory axons. NCAM2 is expressed most strongly in adult and fetal brain.

Full-length extracellular domain of human NCAM2 cDNA (20 – 697aa) was constructed with codon optimization gene synthesis and expressed with a human alpha Fetal Protein N-terminal (AFPn) -His-TEV cleavage site Tag (217aa) fusion at its N-terminal in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

| | | |
|--------------------------|---|------------|
| Gene Symbol: | NCAM2 | (NCAM21) |
| Accession Number: | NP_004531 | |
| Species: | Human | |
| Size: | 50 µg / Vial | |
| Composition: | 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT and others. | |
| Storage: | In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days. | |

Key References

Parcerisas A, et al., *NCAM2 Regulates Dendritic and Axonal Differentiation through the Cytoskeletal Proteins MAP2 and 14-3-3*. Cereb Cortex 30 (6), 3781-3799 (2020)

Rasmussen KK, et al., *NCAM2 Fibronectin type-III domains form a rigid structure that binds and activates the Fibroblast Growth Factor Receptor*. Sci Rep 8 (1), 8957 (2018)



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Winther M, et al., *NCAM2/OCAM/RNCAM: cell adhesion molecule with a role in neuronal compartmentalization*. Int J Biochem Cell Biol 44 (3), 441-446 (2012)

Applications

1. May be used for in vitro NCAM2 mediated neural cell differentiation regulation study in vitro using this recombinant NCAM2 protein either as soluble factor or as coating matrix protein.
2. May be used for NCAM2 protein-protein interaction assay.
3. As native human NCAM2 immunogen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Human AFPn- NCAM2 Fusion Protein Sequence (100.4 kD)

MTLHRNEYGIASILDSYQCTAEISLADLATIFFAQFVQEATYKEVSKMVKDALTAIEKPTGDEQ
SSGCLENQLPAFLEELCHEKEILEKYGHSDCCSQSEEGRHNCFLAHKKPTPASIPLFQVPEPVT
SCEAYEEDRETFMNFYIYEIARRHPFLYAPTILLWAARYDKIIPSCCKAENAVECFQTKAATVT
KELRESSGGSHHHHHGSENLYFQGLLQVTISLSKVELSVGESKFFFTCTAIGEPESIDWYNPQG
EKIISTQRVVVQKEGVRSLTIYNANIEDAGIYRCQATDAKGQTQEATVVLEIYQKLTREVVS
PQEFKQGEDAEVVCRVSSSPAPAVSWLYHNEEVTTISDNRFAMLANNNLQILNINKSDEGIYRC
EGRVEARGEIDFRDIIVIVNVPPAISMPQKSNATAERGEEMTFSCRASGSPEPAISWFRNGKL
IEENEKYILKGSNTELTVRNIINSDGGPYVCRATNKAGEDEKQAFLOVQVPHIIQLKNETTYE
NGQVTLVCDAGEPIPEITWKRAVDGFTFTEGDKSLDGRIEVKGQHGSSSLHIKDKVLSDSGRY
DCEAASRIGGHQKSMYLDIEYAPKFISNQTIIYYSWEGNPINISCDVKSNNPPASIHWRDKLVLP
AKNTTNLKYSTGRKMILEIAPTSNDNDFGRYNCTATNHIGTRFQEYIILALADVPSSPYGVKII
LSQTTAKVSFNKPD SHGGVPIHHYQVDVKEVASEIWKIVRSHGVQTMVVLNNLEPNTTYEIRVA
AVNGKGQGDYSKIEIFQTLVPREPSPPSIHQQPSSGKSFKLSITKQDDGGAPILEYIVKYRSK
KEDQWLEKKVQGNKDHIILEHLQWTMGYEVQITAAANRLGYSEPTVYEFMPPKPNIIKDTLFN