



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CDH13 (Extracellular) Protein
Catalog Number: hRP-0357
Manufacturer: LD Biopharma, Inc.

Introduction

Human Cadherin-13 gene encodes a member of the cadherin superfamily. The encoded protein is localized to the surface of the cell membrane and is anchored by a GPI moiety, rather than by a transmembrane domain. The protein lacks the cytoplasmic domain characteristic of other cadherins, and so is not thought to be a cell-cell adhesion glycoprotein. This protein acts as a negative regulator of axon growth during neural differentiation. It also protects vascular endothelial cells from apoptosis due to oxidative stress, and is associated with resistance to atherosclerosis. The gene is hypermethylated in many types of cancer.

Full-length extracellular domain of human CDH13 gene (139-693 aa) was constructed with 31 N-terminal T7/His tag and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified. Coating this recombinant protein at 1-10 ug / well (6 well plate) in neuronal cell specific medium can be used for human neuronal cell, vascular endothelial cell / receptor interaction study in vitro.

Gene Symbol: CDH13 (CDHH; p105)
Accession Number: NP_001248
Species: Human
Size: 100 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, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -20°C for long term storage. Product is stable at 4 °C for at least 30 days.



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Key References

Ivanov,D., et al. *Cell adhesion molecule T-cadherin regulates vascular cell adhesion, phenotype and motility* Exp. Cell Res. 293 (2), 207-218 (2004).

Andreeva,A.V., et al. *T-cadherin modulates endothelial barrier function*. J. Cell. Physiol. 223 (1), 94-102 (2010).

Applications

1. Protein can be used as coating matrix protein for study human neuronal and vascular endothelial cell / Receptor interaction in vitro.
2. As highly purified protein, may be used as culture matrix protein for human neuronal axon connection study in vitro.

Quality Control

1. Purity: > 90% by SDS-PAGE.
2. Functional Test: Not tested yet.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGFELSIVVSPILIPENQRQPFPRDVGKVVDSDRPERS
KFRLTGKGVDPKGIIFRINENTGSVSVTRTLTLDREVIIVYQLFVETTDVNGKTLEGVPLEVIV
IDQNDNRPIFREGPYIGHVMEGSPTGTTVMRMTAFDADDPATDNALLRYNIRQQTPDKPSPNMF
YIDPEKGDIVTVVSPALLDRETLENPKYELIEAQDMAGLDVGLTGTATATIMIDDKNDHSPKF
TKKEFQATVEEGAVGVIIVNLTVEDKDDPTTGAWRAAYTIINGNPGQSFEIHTNPQTNEGMLSVV
KPLDYEISAFHTLLIKVENEDPLVPDVSYGPSSTATVHITVLDVNEGPFVFPDPMVTRQEDLS
VGSVLLTVNATDPDSLQHTIRYSVYKDPAGWLNINP INGTVDTTAVLDRESPFVDNSVYTALF
LAIDSGNPPATGTGTLITLEDVNDNAPFIYPTVAEVCDDAKNLSVVILGASDKDLHPNTDPFK
FEIHKQAVPKVWKISKINNTALVSLQLNKNANYNLPIMVTDSGKPPMTNITDLRVQVCSR
NSKVDCNAAG