



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CDH15 N-terminal Protein
Catalog Number: hRP-1111
Manufacturer: LD Biopharma, Inc.

Introduction

Human CDH15 gene is a member of the cadherin superfamily of genes, encoding calcium-dependent intercellular adhesion glycoproteins. Cadherins consist of an extracellular domain containing 5 cadherin domains, a transmembrane region, and a conserved cytoplasmic domain. Transcripts from this particular cadherin are expressed in myoblasts and up-regulated in myotubule-forming cells. The protein is thought to be essential for the control of morphogenetic processes, specifically myogenesis, and may provide a trigger for terminal muscle cell differentiation.

N-terminal human CDH15 cDNA, which contains 2 Cadherin domains (61– 246aa, derived from BC008951), was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is expressed 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: CDH15 (CDH14; CDH3; CDHM; MCAD; MRD)
Accession Number: NP_004924
Species: Human
Size: 50 µg / Vial
Composition: 1.0 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 -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Bhalla, K., et al., *Alterations in CDH15 and KIRREL3 in patients with mild to severe intellectual disability*. Am. J. Hum. Genet. 83 (6), 703-713 (2008)



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Krauss, R.S., et al., *Close encounters: regulation of vertebrate skeletal myogenesis by cell-cell contact*. J. Cell. Sci. 118 (PT 11), 2355-2362 (2005)

Applications

1. May be used for in vitro CDH15 N-terminal mediated myogenesis regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used as CDH15 N-terminal Cadherin domain protein-protein interaction assay.
3. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGFLLPYPLVQIKSDKQQLGSVIYSIQGPGVDEEPRGVF
SIDKFTGKVFLNAMLDRKTRFRLRAFALDLGGSTLEDPTDLEIVVVDQNDNRPAFLQEAF
RVLEGAVPGTYVTRAEATDADDPETDNaALRFSILQOGSPELFSIDELTGEIRTVQVGLDRE
VAVYNLTLQVADMSGDGLTATASAWAHNSRNLVAAALRVVAVAVVVA