

LD Biopharma, Inc. 9924 Mesa Rim Road Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

# - PRODUCT DATA SHEET -

Name of Product:Recombinant Human CDH3 (Extracellular) ProteinCatalog Number:hRP-0434Manufacturer:LD Biopharma, Inc.

#### Introduction

Human CDH3 gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. This gene is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. In addition, aberrant expression of this protein is observed in cervical adenocarcinomas. Mutations in this gene have been associated with congential hypotrichosis with juvenile macular dystrophy.

Full-length extracellular domain of human CDH3 gene (108 - 645 aa) was constructed with 29 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 cell type specific medium can be used for tumor cell metastatic regulation study in vitro.

Gene Symbol:	CDH3 (CDHP; HJMD; PCAD)
Accession Number:	NP_001784
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, 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.

#### **Key References**

Cheung,L.W., eal. P-cadherin cooperates with insulin-like growth factor-1 receptor to



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promote metastatic signaling of gonadotropin-releasing hormone in ovarian cancer via p120 catenin. Oncogene 30 (26), 2964-2974 (2011)

Turashvili,G., et al. *P-cadherin expression as a prognostic biomarker in a 3992 case tissue microarray series of breast cancer*. Mod. Pathol. 24 (1), 64-81 (2011)

### Applications

- 1. Protein can be used as coating matrix protein for human tumor cell metastatic regulation study in vitro.
- 2. As highly purified recombinant antigen, it may be used as cancer biomarker for diagnosis application development.

### **Quality Control**

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

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHHGNLYFQGGEFDWVVAPISVPENGKGPFPQRLNQLKSNKDRDTKIF YSITGPGADSPPEGVFAVEKETGWLLLNKPLDREEIAKYELFGHAVSENGASVEDPMNISIIVT DQNDHKPKFTQDTFRGSVLEGVLPGTSVMQVTATDEDDAIYTYNGVVAYSIHSQEPKDPHDLMF TIHRSTGTISVISSGLDREKVPEYTLTIQATDMDGDGSTTTAVAVVEILDANDNAPMFDPQKYE AHVPENAVGHEVQRLTVTDLDAPNSPAWRATYLIMGGDDGDHFTITTHPESNQGILTTRKGLDF EAKNQHTLYVEVTNEAPFVLKLPTSTATIVVHVEDVNEAPVFVPPSKVVEVQEGIPTGEPVCVY TAEDPDKENQKISYRILRDPAGWLAMDPDSGQVTAVGTLDREDEQFVRNNIYEVMVLAMDNGSP PTTGTGTLLLTLIDVNDHGPVPEPRQITICNQSPVRQVLNITDKDLSPHTSPFQAQLTDDSDIY WTAEVNEEGDTVVLSLKKFLKQDTYDVHLSLSDHGNKEQLTVIRATVCDCHGHVETCPGPWKGG