

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 PCDH17 Protein

Catalog Number: hRP-1112

Manufacturer: LD Biopharma, Inc.

Introduction

Human PCDH17 gene belongs to the protocadherin gene family, a subfamily of the cadherin superfamily. The encoded protein contains six extracellular cadherin domains, a transmembrane domain, and a cytoplasmic tail differing from those of the classical cadherins. The encoded protein may play a role in the establishment and function of specific cell-cell connections in the brain. Recent data indicated that PCDH17 also plays an important role as tumor suppressor in various gastric tumor developments.

Full-length mature human PCDH17 cDNA (18–707aa, derived from BC028165) 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: PCDH17 (PCDH68; PCH69)

Accession Number: NP_001035519.1

Species: Human

Size: $50 \mu g / Vial$

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

Hu,X., et al. *Protocadherin 17 acts as a tumour suppressor inducing tumour cell apoptosis and autophagy, and is frequently methylated in gastric and colorectal cancers.* J. Pathol. 229 (1), 62-73 (2013)



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Yang, Y., et al., *PCDH17 gene promoter demethylation and cell cycle arrest by genistein in gastric cancer*. Histol. Histopathol. 27 (2), 217-224 (2012)

Vanhalst,K., et al., delta-Protocadherins: a gene family expressed differentially in the mouse brain. Cell. Mol. Life Sci. 62 (11), 1247-1259 (2005)

Applications

- 1. May be used for in vitro mediated neuronal cell differentiation regulation study with this protein as either coating matrix protein or soluble factor.
- 2. May be used as PCDH17 protein-protein interaction assay.
- 3. Potential diagnostic biomarker protein for gastric tumors.
- 4. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHGNLYFQGGEFLKNLNYSVPEEQGAGTVIGNIGRDARLQPGLPPAE
RGGGGRSKSGSYRVLENSAPHLLDVDADSGLLYTKQRIDRESLCRHNAKCQLSLEVFANDKEIC
MIKVEIQDINDNAPSFSSDQIEMDISENAAPGTRFPLTSAHDPDAGENGLRTYLLTRDDHGLFG
LDVKSRGDGTKFPELVIQKALDREQQNHHTLVLTALDGGEPPRSATVQINVKVIDSNDNSPVFE
APSYLVELPENAPLGTVVIDLNATDADEGPNGEVLYSFSSYVPDRVRELFSIDPKTGLIRVKGN
LDYEENGMLEIDVQARDLGPNPIPAHCKVTVKLIDRNDNAPSIGFVSVRQGALSEAAPPGTVIA
LVRVTDRDSGKNGQLQCRVLGGGGTGGGGGGLGGPGGSVPFKLEENYDNFYTVVTDRPLDRETQD
EYNVTIVARDGGSPPLNSTKSFAIKILDENDNPPRFTKGLYVLQVHENNIPGEYLGSVLAQDPD
LGQNGTVSYSILPSHIGDVSIYTYVSVNPTNGAIYALRSFNFEQTKAFEFKVLAKDSGAPAHLE
SNATVRVTVLDVNDNAPVIVLPTLQNDTAELQVPRNAGLGYLVSTVRALDSDFGESGRLTYEIV
DGNDDHLFEIDPSSGEIRTLHPFWEDVTPVVELVVKVTDHGKPTLSAVAKLIIRSVSGSLPEGV
PRVNGEQHHWDMSLP