



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 CD276 (Extracellular) Protein
Catalog Number: hRP-0433
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human CD276 gene belongs to the immunoglobulin superfamily, and thought to participate in the regulation of T-cell-mediated immune response. Studies show that while the transcript of this gene is ubiquitously expressed in normal tissues and solid tumors, the protein is preferentially expressed only in tumor tissues. Additionally, it was observed that the 3' UTR of this transcript contains a target site for miR29 microRNA, and there is an inverse correlation between the expression of this protein and miR29 levels, suggesting regulation of expression of this gene product by miR29.

Full-length extracellular domain of human CD276 gene (29 - 466 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 T cell specific medium can be used for human T cell / receptor interaction study in vitro.

Gene Symbol:	CD276 (4Ig-B7-H3; B7-H3; B7H3)
Accession Number:	NP_001019907
Species:	Human
Size:	100 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 -20°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

I., et al. *B7-H3: a costimulatory molecule for T cell activation and IFN-gamma*



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

production. Nat. Immunol. 2 (3), 269-274 (2001)

Calabro, L., et al. *Expression and regulation of B7-H3 immunoregulatory receptor, in human mesothelial and mesothelioma cells: immunotherapeutic implications. J. Cell. Physiol. 226 (10), 2595-2600 (2011)*

Applications

1. Protein can be used as coating matrix protein for human T cell / receptor interaction 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

MASMTGGQQMGRGHHHHHGNLYFQGEVQVPEDPVVALVGTDATLCCSFSPPEPGFSLAQLNLIW
QLTDTKQLVHSFAEGQDQGSAYANRTALFPDLLAQGNASLRLQVRVVADEGSFTCFVSIIRDFGS
AAVSLQVAAPYSKPSMTLEPNKDLRPGDTVTTITCSSYQGYPEAEVFWQDGQGVPLTGNTTTSQM
ANEQGLFDVHSILRVVLGANGTYSCLVRNPVLQQDAHSSVTITPQRSPTGAVEVQVPEDPVVAL
VGTDATLRCSFSPEPGFSLAQLNLIWQLTDTKQLVHSFTEGRDQGSAYANRTALFPDLLAQGNA
SLRLQVRVVADEGSFTCFVSIIRDFGSAAVSLQVAAPYSKPSMTLEPNKDLRPGDTVTTITCSSYR
GYPEAEVFWQDGQGVPLTGNTTTSQMANEQGLFDVHSVLRVVLGANGTYSCLVRNPVLQQDAHG
SVTITGQPMTFPPEA