

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 CD93 ProteinCatalog Number:hRP-1792Manufacturer:LD Biopharma, Inc.

Introduction

The protein encoded by human CD93 gene is a cell-surface glycoprotein and type I membrane protein that was originally identified as a myeloid cell-specific marker. The CD93 protein was once thought to be a receptor for C1q, but now is thought to instead be involved in intercellular adhesion and in the clearance of apoptotic cells. The intracellular cytoplasmic tail of this protein has been found to interact with moesin, a protein known to play a role in linking transmembrane proteins to the cytoskeleton and in the remodelling of the cytoskeleton.

Full-length extracellular domain of human CD93 cDNA (24 – 580 aa, derived from BC028075) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein was 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:	CD93 (C1qR; CDw93; dJ737E23.1)
Accession Number:	NP_036204
Species:	Human
Size:	25 µg / Vial
Composition:	0.25 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Gao LJ, et al., The role of globular heads of the C1q receptor in HPV 16 E2-induced human cervical squamous carcinoma cell apoptosis is associated with p38 MAPK/JNK



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activation. J Transl Med 11, 118 (2013)

Kao YC, et al., *The epidermal growth factor-like domain of CD93 is a potent angiogenic factor*. PLoS ONE 7 (12), E51647 (2012)

Chen ZL, et al., *The globular heads of the C1q receptor regulate apoptosis in human cervical squamous carcinoma cells via a p53-dependent pathway.* J Transl Med 10, 255 (2012)

Applications

- 1. May be used for in vitro CD93 mediated endothelial cell migration regulation (Angiogenesis) with this protein either as soluble factor or as coating matrix protein.
- 2. May be used for protein-protein interaction mapping.
- 3. Potential biomarker protein for monitoring tumor cell apoptosis pathway status.
- 4. As immunogen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGEFADTEAVVCVGTACYTAHSGKLSAAEAQNHCNQNGG NLATVKSKEEAQHVQRVLAQLLRREAALTARMSKFWIGLQREKGKCLDPSLPLKGFSWVGGGED TPYSNWHKELRNSCISKRCVSLLLDLSQPLLPSRLPKWSEGPCGSPGSPGSNIEGFVCKFSFKG MCRPLALGGPGQVTYTTPFQTTSSSLEAVPFASAANVACGEGDKDETQSHYFLCKEKAPDVFDW GSSGPLCVSPKYGCNFNNGGCHQDCFEGGDGSFLCGCRPGFRLLDDLVTCASRNPCSSSPCRGG ATCVLGPHGKNYTCRCPQGYQLDSSQLDCVDVDECQDSPCAQECVNTPGGFRCECWVGYEPGGP GEGACQDVDECALGRSPCAQGCTNTDGSFHCSCEEGYVLAGEDGTQCQDVDECVGPGGPLCDSL CFNTQGSFHCGCLPGWVLAPNGVSCTMGPVSLGPPSGPPDEEDKGEKEGSTVPRAATASPTRGP EGTPKATPTTSRPSLSSDAPITSAPLKMLAPSGSPGVWREPSIHHATAASGPQEPAGGDSSVAT QNNDGTDGQK