

LD Biopharma, Inc. 7384 Trade Street, Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human FIBCD1 (Fibrinogen Domain) Protein

Catalog Number: HRP-3193

Manufacturer: LD Biopharma, Inc. USA

Introduction

Human Fibrinogen C domain-containing protein 1 (FIBCD1) gene encodes a single pass type-II membrane protein, which function as acetyl group-binding receptor. It shows a high-affinity and calcium-dependent binding to acetylated structures such as chitin, some N-acetylated carbohydrates, and amino acids, but not to their non-acetylated counterparts. FIBCD1 can facilitate the endocytosis of acetylated components. FIBCD1 mainly expressed in the small and large intestinal epithelial cells with a highly polarized localization to the apical surface corresponding to the brush border and in the ducts of the salivary gland.

Fibrinogen domain of human FIBCD1 cDNA (235 – 458aa) was constructed with codon optimization gene synthesis and expressed with a SuperGFP Protein N-terminal (sfGFP; 257aa) fusion at target protein N-terminal and 11 arginine tag (11R tag) at its C-terminal 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: FIBCD1

Accession Number: NP_116232

Species: Human

Size: $50 \mu g / Vial$

Composition: 2.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with

proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT and

others.

Storage: In Liquid. Keep at -80°C for long term storage. Product is stable

at 4 °C for at least two weeks.

Key References



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Jepsen CS, et al., FIBCD1 Binds Aspergillus fumigatus and Regulates Lung Epithelial Response to Cell Wall Components. Front Immunol 9, 1967 (2018)

Jiang C, et al., Overexpression of FIBCD1 Is Predictive of Poor Prognosis in Gastric Cancer. Am J Clin Pathol 149 (6), 474-483 (2018)

von Huth S, et al., Immunohistochemical Localization of Fibrinogen C Domain Containing 1 on Epithelial and Mucosal Surfaces in Human Tissues. J Histochem Cytochem 66 (2), 85-97 (2018)

Applications

- 1. May be used for in vitro **FIBCD1** Fibringen domain mediated cell endocytosis pathway regulation study in vitro for intestinal epithelial cells with this recombinant sGFP-FIBCD1 protein either as soluble factor or coating materials.
- 2. May be used for **FIBCD1** Fibringen domain protein-protein interaction assay.
- 3. As human **FIBCD1** Fibringen domain antigen for its specific antibody production.

Quality Control

Purity: > 92% by SDS-PAGE.

Recombinant sGFP- Human FIBCD1 (fibringen domain) Protein Sequence (55.1 kD)

MKHHHHHQVSKGEELFTGVVPILVELDGDVNGHKFSVRGEGEGDATNGKLTLKFICTTGKLPV
PWPTLVTTLTYGVQCFSRYPDHMKRHDFFKSAMPEGYVQERTISFKDDGTYKTRAEVKFEGDTL
VNRIELKGIDFKEDGNILGHKLEYNFNSHNVYITADKQKNGIKANFKIRHNVEDGSVQLADHYQ
QNTPIGDGPVLLPDNHYLSTQSVLSKDPNEKRDHMVLLEFVTAAGITHGMDELYKSGLRSGGSG
GENLYFQRSCATGSRPRDCLDVLLSGQQDDGVYSVFPTHYPAGFQVYCDMRTDGGGWTVFQRRE
DGSVNFFRGWDAYRDGFGRLTGEHWLGLKRIHALTTQAAYELHVDLEDFENGTAYARYGSFGVG
LFSVDPEEDGYPLTVADYSGTAGDSLLKHSGMRFTTKDRDSDHSENNCAAFYRGAWWYRNCHTS
NLNGQYLRGAHASYADGVEWSSWTGWQYSLKFSEMKIRPVR