



**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 FNDC4 Protein  
**Catalog Number:** hRP-0515  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Extracellular matrix protein fibronectin (FN) plays an important role in cell adhesion. FN contains FN type I, II and III domains. The FN III repeat is generally about 90 amino acids long and to be composed of seven  $\beta$ -strands, forming two antiparallel  $\beta$ -sheets. FN III domain derived proteins have been demonstrated to bind various proteins with high affinity. Human fibronectin type III domain-containing protein 4 (FNDC4) mRNA was highly enriched in human liver, brain tissue and adipocytes. Currently, FNDC4 function is unknown, but FNDC5 function was recently demonstrated to be a key player in regulation of brown fat cell differentiation.

Full-length extracellular domain of human FNDC4 cDNA (45 - 167aa, derived from BC032725) was constructed with codon optimization 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, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

**Gene Symbol:** FNDC4 (FRCP1)  
**Accession Number:** NP\_073734  
**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 -20°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Teufel, A., et al. *Frcp1 and Frcp2, two novel fibronectin type III repeat containing genes.*



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Gene 297 (1-2), 79-83 (2002)

## **Applications**

1. May be used for in vitro human FNDC4 functional study using recombinant FNDC4 protein mediated intracellular delivery.
2. May be used as specific substrate protein for kinase and ubiquitin related enzyme functional screening assays.
3. May be used as antigen for specific antibody production.

## **Quality Control**

1. Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGHHHHHGNLYFQGGEFDRPPSPVNVTVTHLRANSATVSWDVPEGNIVIGYS  
ISQQRQNGPGQRVIREVNTTTRACALWGLAEDSDYTVQVRSIGLRGESPPGPRVHFRTLKGS  
DR  
LPSNSSSPGDITVEGLDGERPLQT