



**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 DCTN5 Protein  
**Catalog Number:** hRP-0946  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Dynactin is a multimeric protein essential for the minus-end-directed transport driven by microtubule-based motor dynein. The pointed-end sub-complex in dynactin contains p62, p27, p25, and Arp11 subunits, and is thought to participate in interactions with membranous cargo. Human dynactin subunit 5 (DCTN5) gene encodes a subunit of dynactin (p25), a component of the cytoplasmic dynein motor machinery involved in minus-end-directed transport. The encoded protein is a component of the pointed-end sub-complex and is thought to bind membranous cargo. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

Full-length mature protein of human DCTN5 (182 aa, Isoform-I) gene was constructed with 15 aa N-terminal T7 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.

**Gene Symbol:** DCTN5  
**Accession Number:** NP\_115875  
**Species:** Human  
**Size:** 20 µg / Vial  
**Composition:** 0.2 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

Parisi,G., et al., *Dynactins p25 and p27 are predicted to adopt the LbetaH fold*. FEBS



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Lett. 562 (1-3), 1-4 (2004)

Olson, J.E., et al., *Centrosome-related genes, genetic variation, and risk of breast cancer*.  
Breast Cancer Res. Treat. 125 (1), 221-228 (2011)

## **Applications**

1. May be used for in vitro DCTN5 mediated *dynein motor* regulation study for intracellular cargo transportation by intracellular delivery of this protein with “ProFectin” reagent.
2. May be used for mapping DCTN5 protein – protein interaction assay.
3. May be used as specific substrate protein for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
4. May be used for specific antibody production.

## **Quality Control**

Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGEFMELGELLYNKSEYIETASGNKVSQRQSVLCGSQNIIVLNGKTIIVMNDCIIR  
GDLANVRVGRHCVVKSRSVIRPPFKKFSKGVAFPLHIGDHVFI EEDCVVNAAQIGSYVHVGKN  
CVIGRRCVLKDCCKILDNTVLPPEVVPVPPFTVFSGCPGLFSGELPECTQELMIDVTKSYYQKFL  
PLTQV