



LD Biopharma, Inc.
6042 Cornerstone CT. W. Suite E
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CHAD Protein
Catalog Number: hRP-1139
Manufacturer: LD Biopharma, Inc.

Introduction

Human Chondroadherin (CHAD) is a cartilage matrix protein thought to mediate adhesion of isolated chondrocytes. The protein contains 11 leucine-rich repeats flanked by cysteine-rich regions. The chondroadherin messenger RNA is present in chondrocytes at all ages.

Full-length mature form of human CHAD gene cDNA (23 - 359aa, derived from BC036360) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is 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: CHAD (SLRR4A)
Accession Number: NP_001258
Species: Human
Size: 50 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, 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

Haglund,L., et al., *The C-terminal peptide of chondroadherin modulates cellular activity by selectively binding to heparan sulfate chains.* J. Biol. Chem. 288 (2), 995-1008 (2013)

Haglund,L., et al., *Identification and characterization of the integrin alpha2 beta1 binding motif in chondroadherin mediating cell attachment.* J. Biol. Chem. 286 (5), 3925-3934 (2011)



LD Biopharma, Inc.
6042 Cornerstone CT. W. Suite E
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

Mansson, B., *Association of chondroadherin with collagen type II*. J. Biol. Chem. 276 (35), 32883-32888 (2001)

Applications

1. May be used for in vitro CHAD mediated chondrocytes differentiation regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used as CHAD protein-protein interaction assay.
3. As enzymatic substrate for various proteases.
4. As native (non-glycosylated) antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFPCQNCHCHSDLQHVICDKVGLQKIPKVSEKTKLLN
LQRNFPVLAANSFRAMPNLVSLHLQHCQIREVAAGAFRGLKQLIYLYLSHNDIRVLRAGAFDD
LTELTLYLYLDHNKVTTELPRGLLSPLVNLFILQLNHNKIRELRAGAFQGAKDLRWLYLSENALSS
LQPGALDDVENLAKFHVDRNQLSSYPSAALSKLRVVEELKLSHNPLKSIPDNAFQSFGRYLETL
WLDNTNLEKFSDGAFLGVTTLKHVHLENNRLNQLPSNFPFDSLETLALTNNPWKCTCQLRGLRR
WLEAKASRPDATCASPAKFKGQHIRD TDAFRSCKFPTRSKKAGRH