



LD Biopharma, Inc.
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San Diego, CA 92121
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<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human CARD14 Protein
Catalog Number: hRP-0736
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human CARD14 gene belongs to the membrane-associated guanylate kinase (MAGUK) family, a class of proteins that function as molecular scaffolds for the assembly of multiprotein complexes at specialized regions of the plasma membrane. This protein is also a member of the CARD protein family, which is defined by carrying a characteristic caspase-associated recruitment domain (CARD). This protein shares a similar domain structure with CARD11 protein. The CARD domains of both proteins have been shown to specifically interact with BCL10, a protein known to function as a positive regulator of cell apoptosis and NF-kappaB activation. When expressed in cells, this protein activates NF-kB and induces the phosphorylation of BCL10.

Full-length human CARD14 (434 aa, isoform_II) gene was constructed with 15 N-terminal T7 tag and expressed in E.coli as inclusion bodies, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: CARD14 (BIMP2; CARMA2)
Accession Number: NP_438170
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



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Scudiero, I., et al., *Alternative splicing of CARMA2/CARD14 transcripts generates protein variants with differential effect on NF-kappaB activation and endoplasmic reticulum stress-induced cell death.* J. Cell. Physiol. 226 (12), 3121-3131 (2011)

Gaide, O., et al., *Carmal, a CARD-containing binding partner of Bcl10, induces Bcl10 phosphorylation and NF-kappaB activation.* FEBS Lett. 496 (2-3), 121-127 (2001)

Applications

1. May be used for in vitro CARD14 – NFkb interaction study with recombinant CARD14 protein intracellular delivery methods.
2. May be used as enzymatic substrate protein for Kinase, ubiquitin assay.
3. May be used for mapping CARD14 protein binding partner in protein–protein interaction assay in B cells.
4. May be used as antigen for specific antibody development.

Quality Control

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

Recombinant Protein Sequence

MASMTGGQQMGRGEFVSSCELELQEQLRTASDQESGDEELNRLKEENEKLRSLTFSL
AEKDILEQSLDEARGSRQELVERIHSLRERAVAAERQREQYWEEKEQTLLOFQKSKMA
CQLYREKVNALQAQVCELQKERDQAYSARDSAQREISQSLVEKDSLRRQVFELTDQVC
ELRTQLRQLQAEPGVLKQEARTREPCPREKQRLVRMHAICPRDDSDCSLVSSTESQL
LSDLSATSSRELVDSEFRSSSPAPPSQQSLYKRVAEDFGEEPWSFSSCLEIPEGDPGAL
PGAKAGDPHLDYELLDTADLPQLESSLQPVSPGRLLDVSESGVLMRRRPARRILSQVTM
LAFQGDALLEQISVIGGNLTGIFIHRVTPGSAADQMALRPGTQIVMVSRRARPLLSPLG
LMGTVAAGGVTQADFTSPRRCRSTLGWASALSWADVKRSAHL