



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human MAD2L1BP Protein
Catalog Number: hRP-0883
Manufacturer: LD Biopharma, Inc.

Introduction

The protein encoded by human MAD2L1 binding protein (MAD2L1BP) gene was identified as a binding protein of the MAD2 mitotic arrest deficient-like 1 (MAD2/MAD2L1). MAD2 is a key component of the spindle checkpoint that delays the onset of anaphase until all the kinetochores are attached to the spindle. This protein may interact with the spindle checkpoint and coordinate cell cycle events in late mitosis. Alternatively spliced transcript variants encoding distinct isoforms have been observed. Recent data indicated that expression level of MAD2L1BP in various cancer cell line determines anti-mitotic spindle poisons effects as cancer therapeutic agents which may serve as good biomarker for guiding therapeutic protocol selection.

Full-length human MAD2L1BP (274 aa, isoforms-II) 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: MAD2L1BP (CMT2; RP1-261G23)
Accession Number: NP_055443
Species: Human
Size: 50 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Habu,T., et al., *Identification of a MAD2-binding protein, CMT2, and its role in mitosis.*



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EMBO J. 21 (23), 6419-6428 (2002)

Westhorpe, F.G., et al., *p31 comet-mediated extraction of Mad2 from the MCC promotes efficient mitotic exit*. J. Cell. Sci. 124 (PT 22), 3905-3916 (2011)

Miniowitz-Shemtov, S., et al., *Role of phosphorylation of Cdc20 in p31(comet)-stimulated disassembly of the mitotic checkpoint complex*. Proc. Natl. Acad. Sci. U.S.A. 109 (21), 8056-8060 (2012)

Applications

1. May be used for in vitro mitotic slippage regulation study with “ProFectin” based intracellular delivery of this protein.
2. As soluble / native protein, may be used as enzymatic substrate protein for kinase and ubiquitin assay development.
3. May be used for mapping MAD2L1BP protein-protein interaction.
4. Potential biomarker for cancer chemotherapeutic development.
5. May be used as antigen for specific antibody development.

Quality Control

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

Recombinant Protein Sequence

MASMTGGQQMGRGEFMAAPEAEVLSAAVDPDLEWYEKSEETHASQIELLETSSTQEPLNASEAF
CPRDCMVPVVFPGPVSQEGCCQFTCELLKHIMYQRQQLPLPYEQLKHFYRKPSPOAEEMLKKKP
RATTEVSSRKCCQALAELESVLSHLEDFPARTLVPRVLILLGNALSPKEFYELDLSELLAPYSV
DQSLSTAACLRRRLFRAIFMADAFSELQAPPLMGTVMMAQGHRNCGEDWFRPKLNYRVPSRGHKL
TVTLLSCGRPSIRTTAWEDYIWFQAPVTFKGFRE