



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 NUP62 Protein
Catalog Number: hRP-0870
Manufacturer: LD Biopharma, Inc.

Introduction

The nuclear pore complex is a massive structure that extends across the nuclear envelope, forming a gateway that regulates the flow of macromolecules between the nucleus and the cytoplasm. Nucleoporins are the main components of the nuclear pore complex in eukaryotic cells. The protein encoded by human nuclear pore glycoprotein p62 (NUP62) gene is a member of the FG-repeat containing nucleoporins and is localized to the nuclear pore central plug. This protein associates with the importin alpha/beta complex that is involved in the import of proteins containing nuclear localization signals.

Full-length pro-peptide human NUP62 (522aa) gene was constructed with 19 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: NUP62 (IBSN; p62; SNDI)
Accession Number: NP_057637
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

Malik,P., et al., *Herpes simplex virus ICP27 protein directly interacts with the nuclear pore complex through Nup62, inhibiting host nucleocytoplasmic transport pathways*. J. Biol. Chem. 287 (15), 12277-12292 (2012)



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

Ao,Z., et al., *Contribution of host nucleoporin 62 in HIV-1 integrase chromatin association and viral DNA integration.* J. Biol. Chem. 287 (13), 10544-10555 (2012)

Kinoshita,Y., et al., *Nuclear distributions of NUP62 and NUP214 suggest architectural diversity and spatial patterning among nuclear pore complexes.* PLoS ONE 7 (4), E36137 (2012)

Applications

1. May be used for in vitro NUP62 mediated cytoplasmic protein nuclei transportation regulation study with 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 NUP62 protein-protein interaction.
4. May be used as antigen for specific antibody development.

Quality Control

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

Recombinant Protein Sequence

MASMTGGQQMGRGEFGSTSMGFFNFGGTGAPTGGFTFGTAKTATTTTPATGFSFSTSGTGGFNFG
APFQPATSTPSTGLFSLATQTPATQTTGFTFGTATLASGGTGFSLGIGASKLNLNNTAATPAMA
NPSGFGLGSSNLTNAISSVTSSQGTAPTGFVFGPSTTSVAPATTSGGFSFTGGSTAQPSGFNI
GSAGNSAQPTAPATLPFTPATPAATTAGATQPAAPTPTATITSTGPSLFIATAPTSSATTGL
SLCTPVTTAGAPTAGTQGFSLKAPGAASGTSTTTSTAATATATTTSSSSTTGFAFNKPLAPAG
IPSNTAAAVTAPPGPGAAAGAAASSAMTYAQLESLINKWSLELEDQERHFLQQATQVNAWDRTL
IENGKITSLEHREVEKVKLDQKRLDQELDFILSQQKELEDLLSPLLEELVKEQSGTIYLVQHADEE
REKTYKLAENIDAQLKRMAQDLKDIIEHLNTSGAPADTSDPLQQICKILNAHMDSLQWIDQNSA
LLQRKVEEVTKVCEGRRKEQERSFRITFD