



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human SNX5 Protein
Catalog Number: hRP-0945
Manufacturer: LD Biopharma, Inc.

Introduction

Human sorting Nexin-5 (SNX-5) gene encodes a member of the sorting nexin family. Members of this family contain a phox (PX) domain, which is a phosphoinositide binding domain, and are involved in intracellular trafficking. This protein binds to fanconi anemia complementation group A protein, but its function is unknown. This gene results in two transcript variants encoding the same protein. Recent data indicated that SNX5 regulates cell surface receptor internalization, such as D1 dopamine receptor (D1R) and plays a role in blood pressure regulation.

Full-length mature protein of human SNX5 (404 aa) 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: SNX5
Accession Number: NP_055241
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, 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

Villar,V.A., et al., *Novel role of sorting nexin 5 in renal D(1) dopamine receptor trafficking and function: implications for hypertension.* FASEB J. 27 (5), 1808-1819 (2013)



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Ara,S., et al., *Sorting nexin 5 of a new diagnostic marker of papillary thyroid carcinoma regulates Caspase-2*. Cancer Sci. 103 (7), 1356-1362 (2012)

Applications

1. May be used for in vitro SNX5 mediated *cell receptor internalization* regulation study by intracellular delivery of this protein with “ProFectin” reagent.
2. May be used for mapping SNX5 protein – protein interaction assay.
3. May be used as specific substrate protein for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
4. Potential biomarker protein for papillary thyroid carcinoma diagnosis.
5. May be used for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFMAAVPELLQQQEEDRSKLRSVSVDLNVDPQLQIDIPDALSERDKVKFTV
HTKTTLPTFQSPEFSVTRQHEDFVWLHDTLIETTDYAGLIIPPAPTKPDFDGPREKMQKLGEGE
GSMTKEEFKMKQELEAEYLAVFKKTVSSHEVFLQRLSSHPVLSKDRNFHVVFLEYDQDLSVRRK
NTKEMFGGFKSVVKSADDEVLF'GVKEVDFFFEQKNFLINYYNR IKDSCVKADKMTRSHKNVA
DDYIHTAACLSLAL EEP TVIKKYLLKVAELFEKLRKVEGRVSSDEDLKLTELLRYYMLNIEAA
KDLLYRRTKALIDYENSNKALDKARLKS KDVKLAEAHQQECCQKFEQLSESAKEELINFKRKR
VAAF'RKNLIEMSELEIKHARNNVSLLOSCIDLFKNN