

Recombinant human SAR1A protein

Catalog Number: ATGP0347

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-198aa

UniProt No.

Q9NR31

NCBI Accession No.

NP_064535

Alternative Names

SARA 1, Sara, SAR1a gene homolog 1 COPII associated small GTPase, SAR1a gene homolog 1 (*S. cerevisiae*), SAR1A, SAR1 homolog A (*S. cerevisiae*), SAR1 gene homolog A, SAR 1, Masra 2, GTP binding protein SAR1a, COPII-associated small GTPase

PRODUCT SPECIFICATION

Molecular Weight

24.5 kDa (218aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SAR1a gene homolog 1, also known as SAR1A, belongs to the small GTPase superfamily. Sar1 is an essential component of COPII vesicle coats involved in export of cargo from the ER. The GTPase activity of Sar1 functions as a molecular switch to control protein-protein and protein-lipid interactions that direct vesicle budding from the ER. GDP-bound Sar1 interacts with the membrane-bound exchange factor Sec12 and exchanges its bound GDP

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for GTP. Recombinant human SAR1A, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MSFIFEWIYN GFSSVLQFLG LYKKSGLVF LGLDNAGKTT LLHMLKDDRL
GQHVPTLHPT SEELTIAGMT FTTFDLGGHE QARRVWKNYL PAINGIVFLV DCADHSRLVE SKVELNALMT DETISNPIL
ILGNKIDRTD AISEEKLREI FGLYGQTTGK GNVTLKELNA RPMEVFMCSV LKRQGYGEGF RWLSQYID

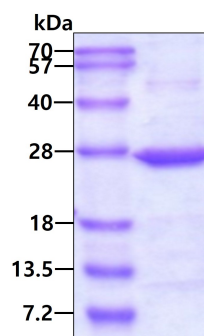
General References

Jones B., et al. (2003) Nat Genet. 34(1):29-31.

Bi X., et al. (2007) Dev Cell. 13(5):635-45.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.