abcam

Product datasheet

Recombinant Human BBS1 protein ab157954

1 Image

Description

Product name Recombinant Human BBS1 protein

Expression system Wheat germ

Accession Q4G0L2

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MSPGPQLWHLLQALVSMCIRISDPTSSSAYPNCLQILWNK

TFGTRPKRET

AEEPLSIQSLRFLQLELSEMEAFVNQHKSNSIKRQTVITTM

TTLKKNLAD

EDAVSCLVLGTENKELLVLDPEAFTILAKMSLPSVPVFLE

VSGQFDVEFR

LAAACRNGNIYILRRDSKHPKYCIELSAQPVGLIRVHKVLVV

GSTQDSLH

GFTHKGKKLWTVQMPAAILTMNLLEQHSRGLQAVMAGLA

NGEVRIYRDKA

LLNVIHTPDAVTSLCFGRYGREDNTLIMTTRGGGLIIKILKRT

AMFVEGG

SEVGPPPAQAMKLNVPRKTRLYVDQTLREREAGTAMHRA

FQTDLYLLRLR

AARAYLQALESSLSPLSTTAREPLKLHAVVQGLGPTFKLT

LHLQNTSTTR

PVLGLLVCFLYNEALYSLPRAFFKVPLLVPGLNYPLETFVE

SLSNKGISD IIKVGPALVPRGR

Amino acids 1 to 463

Tags GST tag N-Terminus

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab157954 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Western blot

1

ELISA

Form

Liquid

Additional notes

Preparation and Storage

Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.31% Glutathione, 0.79% Tris HCI

General Info

Function

The BBSome complex is required for ciliogenesis but is dispensable for centriolar satellite function. This ciliogenic function is mediated in part by the Rab8 GDP/GTP exchange factor, which localizes to the basal body and contacts the BBSome. Rab8(GTP) enters the primary cilium and promotes extension of the ciliary membrane. Firstly the BBSome associates with the ciliary membrane and binds to Rabin8, the guanosyl exchange factor (GEF) for Rab8 and then the Rab8-GTP localizes to the cilium and promotes docking and fusion of carrier vesicles to the base of the ciliary membrane.

Tissue specificity

Highly expressed in the kidney. Also found in fetal tissue, testis, retina, adipose tissue, heart, skeletal muscle and pancreas.

Involvement in disease

Defects in BBS1 are a cause of Bardet-Biedl syndrome type 1 (BBS1) [MIM:209900]. Bardet-Biedl syndrome (BBS) is a genetically heterogeneous disorder characterized by usually severe pigmentary retinopathy, early onset obesity, polydactyly, hypogenitalism, renal malformation and mental retardation. Secondary features include diabetes mellitus, hypertension and congenital heart disease. A relatively high incidence of BBS is found in the mixed Arab populations of Kuwait and in Bedouin tribes throughout the Middle East, most likely due to the high rate of consaguinity in these populations and a founder effect. Inheritance is autosomal recessive, but three mutated alleles (two at one locus, and a third at a second locus) may be required for disease manifestation in some cases (triallelic inheritance).

Cellular localization

Cell projection > cilium membrane. Cytoplasm. Localizes to nonmembranous centriolar satellites in the cytoplasm.

Images

ab157954 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors