

Rabbit Anti-BBS1 antibody

SL11507R

Product Name:	BBS1
Chinese Name:	巴尔得-别德尔综合征相关蛋白5抗体
Alias:	AI451249; Bardet-Biedl syndrome 1; Bardet-Biedl syndrome 1 homolog; Bardet-Biedl syndrome 1 protein; BBS1; BBS1_HUMAN; BBS2-like protein 2; D19Ertd609e.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	65kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human BBS5:181-270/593
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

Function:

This gene encodes a protein that has been directly linked to Bardet-Biedl syndrome. The primary features of this syndrome include retinal dystrophy, obesity, polydactyly, renal abnormalities and learning disabilities. Experimentation in non-human eukaryotes suggests that this gene is expressed in ciliated cells and that it is required for the formation of cilia. Alternate transcriptional splice variants have been observed but have not been fully characterized.

Subunit:

Part of BBSome complex, that contains BBS1, BBS2, BBS4, BBS5, BBS7, BBS8, BBS9 and BBIP10. The BBSome complex binds to PCM1 and tubulin. Interacts with the C-terminus of RAB3IP. Interacts with CCDC28B.

Subcellular Location:

Cell projection

Tissue Specificity:

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

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).

SWISS:

O8NFJ9

Gene ID:

582

Database links:

Entrez Gene: 582Human

Entrez Gene: 52028 Mouse

Entrez Gene: 309156Rat

Omim: 209901Human

SwissProt: Q8NFJ9Human

<u>Unigene: 502915</u>Human

Unigene: 23636 Mouse

Unigene: 12497Rat

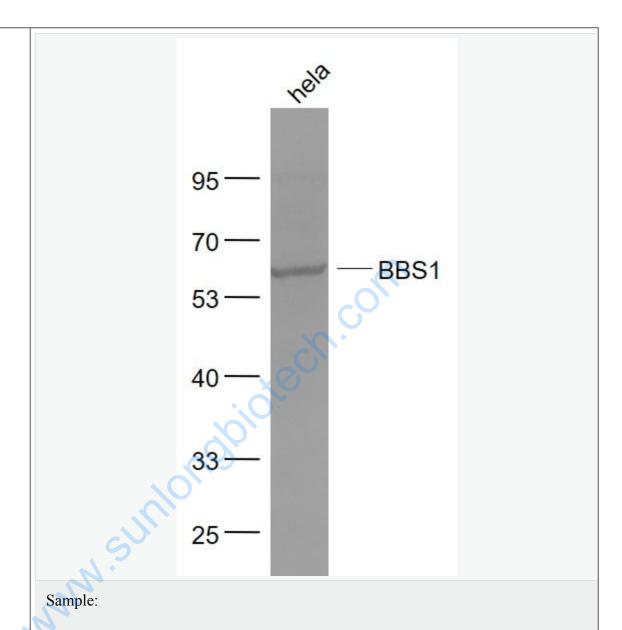
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

BBS蛋白是一类研究早期儿童肥胖综合症有关的其中一种。巴尔得-

别德尔综合征(Bardet-Biedl

syndrome, BBS)的特征为不同程度的肥胖、智力延迟、色素视网膜病变、多指和肾脏异常。



Picture:

Hela(Human) Cell Lysate at 30 ug

Primary: Anti- BBS1 (SL11507R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

Observed band size: 65 kD