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BBS5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20560a

Product Information

Application	WB, E
Primary Accession	Q8N3I7
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB47475
Calculated MW	38755

Additional Information

Gene ID	129880
Other Names	Bardet-Biedl syndrome 5 protein, BBS5
Target/Specificity	This BBS5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 108-141 amino acids from the Central region of human BBS5.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BBS5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	BBS5
Function	The BBSome complex is thought to function as a coat complex required for sorting of specific membrane proteins to the primary cilia. 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 RAB3IP/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. The BBSome complex, together with the LTZL1, controls SMO ciliary trafficking and contributes to the sonic hedgehog (SHH) pathway regulation. Required for BBSome complex ciliary localization but not for the proper complex assembly.

Cellular Location

Cell projection, cilium membrane. Cytoplasm. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Note=Localizes to basal bodies.

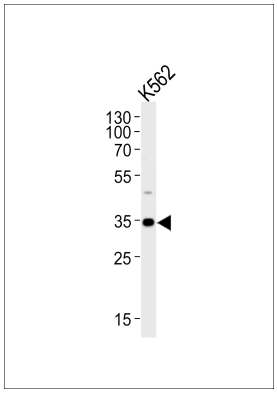
Background

The BBSome complex is thought to function as a coat complex required for sorting of specific membrane proteins to the primary cilia. 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 RAB3IP/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. The BBSome complex, together with the LTZL1, controls SMO ciliary trafficking and contributes to the sonic hedgehog (SHH) pathway regulation. Required for BBSome complex ciliary localization but not for the proper complex assembly.

References

Li J.B.,et al.Cell 117:541-552(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Badano J.L.,et al.Nature 439:326-330(2006).

Images



Western blot analysis of lysate from K562 cell line, using BBS5 Antibody (Center)(Cat. #AP20560a). AP20560a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.