

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) Peptide-affinity purified goat antibody Catalog # AF3423a

Specification

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>O96RK4</u> <u>NP_149017.2, 585, 102774 (mouse)</u> Human Mouse, Pig, Dog Goat Polyclonal 0.5 mg/ml IgG 58282

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - Additional Information

Gene ID 585

Other Names Bardet-Biedl syndrome 4 protein, BBS4

Dilution WB~~1:1000 E~~N/A

Format 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - Protein Information

Name BBS4

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 proper BBSome complex assembly and its ciliary localization. Required for microtubule anchoring at the centrosome but not for microtubule nucleation. May be required for the dynein-mediated transport of pericentriolar proteins to the centrosome.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium membrane. Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q8C1Z7}. Cell projection, cilium {ECO:0000250|UniProtKB:Q8C1Z7}. Note=Localizes to the pericentriolar material. Centrosomal localization requires dynein (By similarity) Localizes to the connecting cilium of photoreceptor cells (By similarity). {ECO:0000250|UniProtKB:Q8C1Z7}

Tissue Location

Ubiquitously expressed. The highest level of expression is found in the kidney

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - Images



AF3423a (1 µg/ml) staining of Human Testis lysate (35 µg protein in RIPA buffer). Primary



incubation was 1 hour. Detected by chemiluminescence.

BBS4 (aa 33-46) Antibody (Internal Region, near N-Term) - References

Loss of Bardet-Biedl syndrome proteins alters the morphology and function of motile cilia in airway epithelia. Shah AS, Farmen SL, Moninger TO, Businga TR, Andrews MP, Bugge K, Searby CC, Nishimura D, Brogden KA, Kline JN, Sheffield VC, Welsh MJ, Proceedings of the National Academy of Sciences of the United States of America 2008 Mar 105 (9): 3380-5. PMID: 18299575