

BBS4 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7562c**Specification**

BBS4 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q96RK4](#)**BBS4 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 585**Other Names**

Bardet-Biedl syndrome 4 protein, BBS4

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7562c](/product/products/AP7562c) was selected from the Center region of human BBS4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BBS4 Antibody (Center) Blocking Peptide - 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 RAB31P/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 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

BBS4 Antibody (Center) Blocking Peptide - Images**BBS4 Antibody (Center) Blocking Peptide - Background**

BBS4 contains tetratricopeptide repeats (TPR), similar to O-linked N-acetylglucosamine transferase. Mutations in the gene encoding this protein have been observed in patients with Bardet-Biedl syndrome type 4. BBS4 may play a role in pigmentary retinopathy, obesity, polydactyly, renal malformation and mental retardation.

BBS4 Antibody (Center) Blocking Peptide - References

Nachury,M.V.,Cell 129 (6), 1201-1213 (2007)Ye,X.,DNA Seq. 15 (3), 213-218 (2004)Kim,J.C.,Nat. Genet. 36 (5), 462-470 (2004)