

# Product datasheet

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ARG55131 anti-BBS4 antibody

Package: 100 μl Store at: -20°C

## Summary

Product Description Mouse Monoclonal antibody recognizes BBS4

Tested Reactivity Hu, Ms, Rat

Tested Application WB

Host Mouse

Clonality Monoclonal

Clone 1292CT845.130.218

Isotype IgG1
Target Name BBS4

Species Human

**Immunogen** Recombinant protein corresponding to aa. 1-240 of Human BBS4.

Conjugation Un-conjugated

Alternate Names Bardet-Biedl syndrome 4 protein

# **Application Instructions**

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	

### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links GenelD: 102774 Mouse

GeneID: 585 Human

Swiss-port # Q8C1Z7 Mouse

Swiss-port # Q96RK4 Human

Gene Symbol BBS4

Gene Full Name Bardet-Biedl syndrome 4

Background This gene is a me

This gene is a member of the Bardet-Biedl syndrome (BBS) gene family. Bardet-Biedl syndrome is an autosomal recessive disorder characterized by severe pigmentary retinopathy, obesity, polydactyly, renal malformation and mental retardation. The proteins encoded by BBS gene family members are structurally diverse. The similar phenotypes exhibited by mutations in BBS gene family members are likely due to the protein's shared roles in cilia formation and function. Many BBS proteins localize to the basal bodies, ciliary axonemes, and pericentriolar regions of cells. BBS proteins may also be involved in intracellular trafficking via microtubule-related transport. The protein encoded by this gene has sequence similarity to O-linked N-acetylglucosamine (O-GlcNAc) transferases in plants and archaebacteria and in human forms a multi-protein "BBSome" complex with seven other BBS proteins. Alternative splice variants have been described but their predicted protein products have not been experimentally verified.[provided by RefSeq, Oct 2014]

experimentally verified.[provided by RefSeq, Oct 2014

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. [UniProt]

Research Area Neuroscience antibody

Calculated Mw 58 kDa

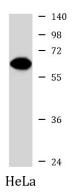
Cellular Localization Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton. Cell

projection, cilium membrane. Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite Cell projection, cilium, flagellum. Note=Localizes to the pericentriolar

region throughout the cell cycle Centrosomal localization requires dynein

#### **Images**

Function



#### ARG55131 anti-BBS4 antibody WB image

Western blot: 35  $\mu g$  of HeLa cell lysate stained with ARG55131 anti-BBS4 antibody at 1:1000 dilution.