10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

B9D1 Antibody
Catalog # ASC11440

Specification

B9D1 Antibody - Product Information

Application	**WB, ICC, IF**
Primary Accession	Q9UPM9
Other Accession	NP_056496, 343478275
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**B9D1 antibody can be used for detection of B9D1 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

B9D1 Antibody - Additional Information

Gene ID **27077**

Target/Specificity
B9D1; At least two isoforms of B9D1 are known to exist; this antibody will only recognize the longest isoform. B9D1 antibody is predicted to not cross-react with other DNAJC family members.

Reconstitution & Storage
B9D1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
B9D1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

B9D1 Antibody - Protein Information

Name B9D1

Synonyms MKSR1

Function
Component of the tectonic-like complex, a complex localized at the transition zone of primary cilia and acting as a barrier that prevents diffusion of transmembrane proteins between the cilia and plasma membranes. Required for ciliogenesis and sonic hedgehog/SHH signaling (By similarity).

Cellular Location
Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, cilium axoneme. Note=Localizes at the transition zone, a region between the basal body and the ciliary axoneme.

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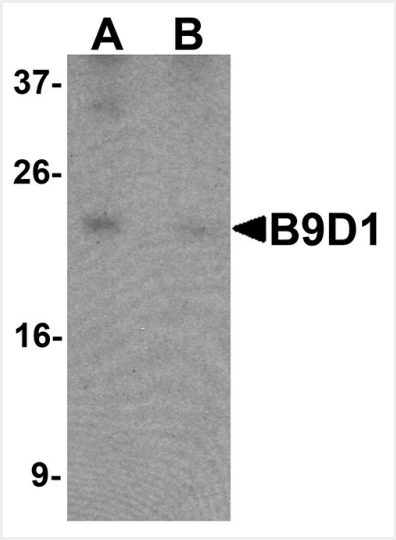
B9D1 Antibody - Protocols

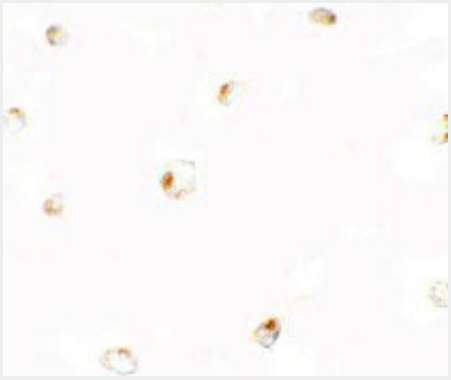
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

B9D1 Antibody - Images



Western blot analysis of B9D1 in 293 cell lysate with B9D1 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of B9D1 in 293 cells with B9D1 antibody at 5 µg/mL.

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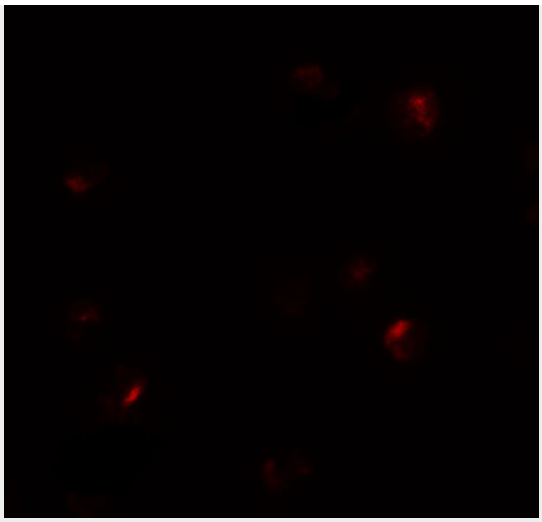

Immunofluorescence of B9D1 in 293 cells with B9D1 antibody at 20 µg/mL.

B9D1 Antibody - Background

B9D1 Antibody: Meckel syndrome (MKS) is an embryonic lethal, autosomal recessive disorder characterized by polycystic kidney disease, central nervous system defects, polydactyly and liver fibrosis. B9D1 is a B9 domain-containing protein, one of several that are involved in ciliogenesis. Alterations in expression of this gene have been found in a family with Meckel syndrome. B9D1, and its related protein B9D2, form a complex with MKS1, disruption of which causes MKS. B9D1 is thought to be required for normal hedgehog signaling, ciliogenesis, and ciliary protein localization.

B9D1 Antibody - References

Williams CL, Winkelbauer ME, Schafer JC, et al. Functional redundancy of the B9 proteins and nephocystins in Caenorhabditis elegans ciliogenesis. Mol. Biol. Cell 2008; 19:2154-68.
Hopp K, Heyer CM, Hommerding CJ, et al. B9D1 is revealed as a novel Meckel syndrome (MKS) gene by targeted exon-enriched next-generation sequencing and deletion analysis. Hum. Mol. Genet. 2011; 20:2524-34.
Dowdle WE, Robinson JF, Kneist A, et al. Disruption of a ciliary B9 protein complex causes Meckel syndrome. Am. J. Hum. Genet. 2011; 89:94-110.