

### **DZIP1 Antibody (Center) Blocking Peptide** Synthetic peptide

Catalog # BP8926c

## Specification

# DZIP1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

### <u>Q86YF9</u>

# DZIP1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 22873

**Other Names** Zinc finger protein DZIP1, DAZ-interacting protein 1/2, DZIP1, DZIP2, KIAA0996

Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8926c>AP8926c</a> was selected from the Center region of human DZIP1. 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.

# DZIP1 Antibody (Center) Blocking Peptide - Protein Information

Name DZIP1 (HGNC:20908)

Synonyms DZIP, DZIP2, KIAA0996

### Function

Molecular adapter that recruits protein complexes required for cilium assembly and function to the cilium basal body (PubMed:<a href="http://www.uniprot.org/citations/19852954" target="\_blank">19852954</a>, PubMed:<a href="http://www.uniprot.org/citations/23955340" target="\_blank">23955340</a>, PubMed:<a href="http://www.uniprot.org/citations/27979967" target="\_blank">27979967</a>, PubMed:<a href="http://www.uniprot.org/citations/27979967" target="\_blank">27979967</a>, PubMed:<a href="http://www.uniprot.org/citations/22951257" target="\_blank">27979967</a>, PubMed:<a href="http://www.uniprot.org/citations/32051257" target="\_blank">32051257</a>). At the exit of mitosis, localizes to the basal body and ciliary base of the forming primary cilium where it recruits and activates RAB8A to direct vesicle-mediated transport of proteins to the cilium (By similarity). Also recruits the BBSome, a complex involved in cilium biogenesis, by bridging it to PCM1 at the centriolar satellites of the cilium (PubMed:<a href="http://www.uniprot.org/citations/27979967""



target="\_blank">27979967</a>). It is also required for the recruitment to the cilium basal body of the intraflagellar transport (IFT) machinery as well as the ciliary appendage proteins CEP164 and NINEIN (By similarity). Functions as a regulator of Hedgehog signaling both through its role in cilium assembly but also probably through its ability to retain GLI3 within the cytoplasm (By similarity). It is involved in spermatogenesis through its role in organization of the basal body and assembly of the sperm flagellum (PubMed:<a href="http://www.uniprot.org/citations/32051257" target="\_blank">32051257</a>). Also indirectly involved in heart development through its function in ciliogenesis (PubMed:<a href="http://www.uniprot.org/citations/31118289" target="\_blank">31118289</a>).

### **Cellular Location**

Cytoplasm, cytoskeleton, cilium basal body. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Nucleus. Nucleus speckle {ECO:0000250|UniProtKB:Q8BMD2}. Cytoplasm. Note=Localizes to the centriole in cells lacking cilia and to the cilium basal body in ciliated cells (PubMed:19852954). At the exit of mitosis, when the primary cilium is reassembled in daughter cells, localizes at the mother centriole that acts as the basal body of the assembling primary cilium and also accumulates at the ciliary base that constitutes a diffusion barrier for ciliary proteins (By similarity). {ECO:0000250|UniProtKB:Q8BMD2, ECO:0000269|PubMed:19852954}

### **Tissue Location**

Predominantly expressed in testis (at protein level) (PubMed:15081113, PubMed:32051257). Also expressed in fetal brain, adult oocytes and ovary (PubMed:15081113). Expressed in undifferentiated ES cells (PubMed:15081113). In testis, it is specifically expressed in germ cells (at protein level) (PubMed:15081113, PubMed:32051257). Expressed in mature germ cells and secondary spermatocytes, while it is weakly or not expressed in primary spermatocytes (PubMed:15081113).

# DZIP1 Antibody (Center) Blocking Peptide - Protocols

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

### Blocking Peptides

### DZIP1 Antibody (Center) Blocking Peptide - Images

### DZIP1 Antibody (Center) Blocking Peptide - Background

DZIP1 may participate in spermatogenesis via its interaction with DAZ. Isoform 1 and isoform 2 interact with DAZ proteins. DZIP1 may also participate in a RNA-binding complex that functions in both ES cells and germ cells. There are three named isoforms.

## DZIP1 Antibody (Center) Blocking Peptide - References

Moore, F.L., et.al., Genomics 83 (5), 834-843 (2004)