

DZIP1 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP21074a

Specification

DZIP1 Blocking Peptide (C-term) - Product Information

Primary Accession

Q86YF9

DZIP1 Blocking Peptide (C-term) - 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 is selected from aa 747-761 of HUMAN DZIP1

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 Blocking Peptide (C-term) - 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:19852954, PubMed:23955340, PubMed:27979967, PubMed:32051257). 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:27979967). 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:32051257). Also indirectly involved in heart development through its function in ciliogenesis (PubMed:31118289).

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 Blocking Peptide (C-term) - Protocols

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

Blocking Peptides

DZIP1 Blocking Peptide (C-term) - Images

DZIP1 Blocking Peptide (C-term) - Background

May participate in spermatogenesis via its interaction with DAZ.

DZIP1 Blocking Peptide (C-term) - References

Moore F.L.,et al.Proc. Natl. Acad. Sci. U.S.A. 100:538-543(2003). Nagase T.,et al.DNA Res. 6:63-70(1999). Dunham A.,et al.Nature 428:522-528(2004). Bechtel S.,et al.BMC Genomics 8:399-399(2007). Moore F.L.,et al.Genomics 83:834-843(2004).