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HOOK1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54811

Specification

HOOK1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q9UJC3
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**85 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from Human HOOK1**
Epitope Specificity	**551-650/728**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm, cytoskeleton. Cytoplasm. Note=Localizes to the spermatid manchette during spermiogenesis but is not present in mature spermatozoa. Localizes to punctate cytoplasmic foci which do not appear to overlap with early or late endosomes, the endoplasmic reticulum, the Golgi complex, multivesicular bodies (MVBs), lysosomes, or mitochondria. Often found in close association with microtubules.**
SIMILARITY	**Belongs to the hook family.**
SUBUNIT	**Self-associates. Component of the FTS/Hook/FHIP complex (FHF complex), composed of AKTIP/FTS, FAM160A2, and one or more members of the Hook family of proteins HOOK1, HOOK2, and HOOK3. May interact directly with AKTIP/FTS, HOOK2 and HOOK3. Associates with several subunits of the homotypic vesicular sorting complex (the HOPS complex) including VPS16, VPS18, VPS39 and VPS41; these interactions may be indirect. Interacts with microtubules.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
Microtubules mediate the spatial organization of diverse membrane-trafficking systems. The HOOK

proteins, HOOK1, HOOK2 and HOOK3, comprise a family of cytosolic coiled-coil proteins that contain conserved N-terminal domains, which attach to microtubules; and more divergent C-terminal domains, which mediate binding to organelles. HOOK1, a cytoskeletal linker protein, may play a role in endocytic membrane trafficking. It exists as a homodimer, most likely mediated through its central coiled-coil domain. HOOK1 interacts with VPS18 and is required for spermatid differentiation, in which it is most likely involved in the positioning of the manchette microtubules and the flagellum. HOOK1 localizes primarily to the cytoplasm and does not associate with the Golgi complex, unlike HOOK3, which participates in the organization of the cis-Golgi compartment.

HOOK1 Polyclonal Antibody - Additional Information

Gene ID 51361

Other Names
Protein Hook homolog 1, h-hook1, hHK1, HOOK1

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

HOOK1 Polyclonal Antibody - Protein Information

Name HOOK1 (HGNC:19884)

Function
Component of the FTS/Hook/FHIP complex (FHF complex) (PubMed:18799622, PubMed:32073997). The FHF complex may function to promote vesicle trafficking and/or fusion via the homotypic vesicular protein sorting complex (the HOPS complex) (PubMed:18799622). FHF complex promotes the distribution of AP-4 complex to the perinuclear area of the cell (PubMed:32073997). Required for spermatid differentiation. Probably involved in the positioning of the microtubules of the manchette and the flagellum in relation to the membrane skeleton (By similarity).

Cellular Location
Cytoplasm. Cytoplasm, cytoskeleton. Note=Localizes to punctate cytoplasmic foci which do not appear to overlap with early or late endosomes, the endoplasmic reticulum, multivesicular bodies (MVBs), lysosomes, or mitochondria (By similarity). Often found in close association with microtubules (By similarity). Does not associate with the Golgi complex. During spermiogenesis, it localizes to the manchette in spermatids from steps 8-10. It is also present between the microtubule manchette and the nucleus. During manchette elongation, it is preferentially localized

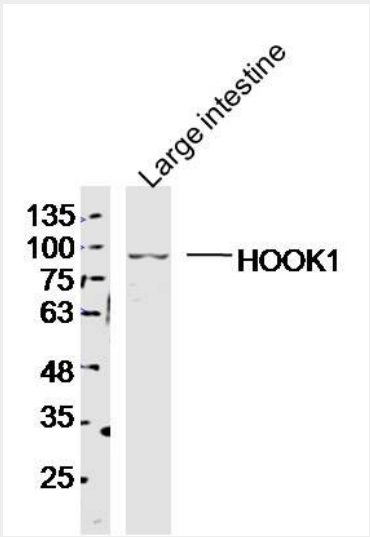
to the nuclear ring of the manchette, whereas the strong localization to the manchette decreases. In more mature spermatids, while the manchette migrates posteriorly, it localizes to punctuates spots. At later stages of spermatid differentiation, the punctuate expression pattern is found at both the attachment site and the proximal end of the elongated manchette. In contrast, it is not present in mature spermatozoa (By similarity) {ECO:0000250|UniProtKB:Q8BIL5}

HOOK1 Polyclonal 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

HOOK1 Polyclonal Antibody - Images



Sample: Large intestine (Mouse) Lysate at 40 ug
Primary: Anti-HOOK1 (bs-12287R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 85 kD
Observed band size: 85 kD