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AZI1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50845

Product Information

Application	WB, IHC
Primary Accession	Q9UPN4
Reactivity	Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	122149

Additional Information

Gene ID	22994
Other Names	Centrosomal protein of 131 kDa, 5-azacytidine-induced protein 1, Pre-acrosome localization protein 1, CEP131, AZI1, KIAA1118
Dilution	WB~~ 1:1000 IHC~~1:50~100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	CEP131
Synonyms	AZI1, KIAA1118
Function	Component of centriolar satellites contributing to the building of a complex and dynamic network required to regulate cilia/flagellum formation (PubMed:17954613, PubMed:24185901). In proliferating cells, MIB1-mediated ubiquitination induces its sequestration within centriolar satellites, precluding untimely cilia formation initiation (PubMed:24121310). In contrast, during normal and ultraviolet or heat shock cellular stress-induced ciliogenesis, its non-ubiquitinated form is rapidly displaced from centriolar satellites and recruited to centrosome/basal bodies in a microtubule- and p38 MAPK-dependent manner (PubMed:24121310, PubMed:26616734). Also acts as a negative regulator of BBSome ciliary trafficking (PubMed:24550735). Plays a role in sperm flagellar formation; may be involved in the regulation of intraflagellar transport (IFT) and/or intramanchette (IMT) trafficking, which are important for axoneme extension and/or cargo delivery to the nascent sperm tail (By similarity). Required for optimal cell proliferation and cell cycle progression; may play a role in the regulation of genome stability in

non-ciliogenic cells (PubMed:22797915, PubMed:26297806). Involved in centriole duplication (By similarity). Required for CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of CDK2 (PubMed:26297806). Essential for maintaining proper centriolar satellite integrity (PubMed:30804208).

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole. Cytoplasm, cytoskeleton, cilium basal body. Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q62036}. Note=Colocalized with pericentriolar material protein PCM1 at centriolar satellites. During spermiogenesis, becomes enriched with nephrocystin NPHP1 at the transition zone, a structure at the base of the ciliary axoneme important for regulating traffic into the ciliary compartment. Traffics towards and away from the centrosome/basal body and the transition zone of the ciliary axoneme in a microtubule-dependent manner. Localized at the Golgi- derived acrosome and the centrosome-containing head-tail coupling apparatus (HTCA) (By similarity). Ubiquitinated form is sequestered and colocalized with BBS4, CEP290, PCM1 and PCNT at centriolar satellites in proliferating cells. Colocalized with the pericentriolar material protein PCM1 at centrosome. Traffics towards and away from centriolar satellites and centrosome in a microtubule- and dynein-dependent manner in interphase cells. Displaced from centriolar satellites but still remains associated with the centrosome in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock, in a process that requires p38 MAPK signaling (PubMed:26616734). {ECO:0000250, ECO:0000269|PubMed:26616734}

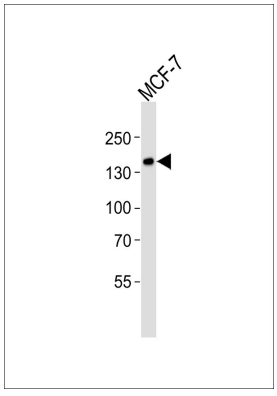
Background

May play a role in spermatogenesis (By similarity).

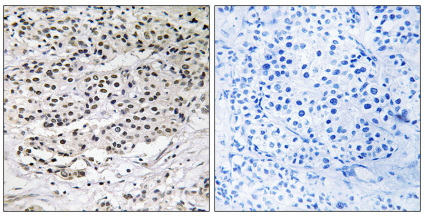
References

Kikuno R.,et al.DNA Res. 6:197-205(1999).
Zody M.C.,et al.Nature 440:1045-1049(2006).
Andersen J.S.,et al.Nature 426:570-574(2003).
Olsen J.V.,et al.Cell 127:635-648(2006).
Beausoleil S.A.,et al.Nat. Biotechnol. 24:1285-1292(2006).

Images



Western blot analysis of lysate from MCF-7 cell line,using AZI1 Antibody,was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using AZI1 antibody.

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