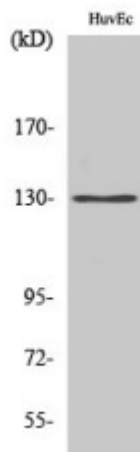


## Anti-AZI1 antibody



|                         |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>      | Rabbit polyclonal to AZI1.                                                                                            |
| <b>Model</b>            | STJ91793                                                                                                              |
| <b>Host</b>             | Rabbit                                                                                                                |
| <b>Reactivity</b>       | Human                                                                                                                 |
| <b>Applications</b>     | ELISA, IHC, WB                                                                                                        |
| <b>Immunogen</b>        | Synthesized peptide derived from human AZI1                                                                           |
| <b>Immunogen Region</b> | 280-360 aa, Internal                                                                                                  |
| <b>Gene ID</b>          | <a href="#">22994</a>                                                                                                 |
| <b>Gene Symbol</b>      | <a href="#">CEP131</a>                                                                                                |
| <b>Dilution range</b>   | WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000                                                                           |
| <b>Specificity</b>      | AZI1 Polyclonal Antibody detects endogenous levels of AZI1 protein.                                                   |
| <b>Purification</b>     | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| <b>Note</b>             | For Research Use Only (RUO).                                                                                          |
| <b>Protein Name</b>     | Centrosomal protein of 131 kDa 5-azacytidine-induced protein 1 Pre-acrosome localization protein 1                    |
| <b>Molecular Weight</b> | 130 kDa                                                                                                               |
| <b>Clonality</b>        | Polyclonal                                                                                                            |
| <b>Conjugation</b>      | Unconjugated                                                                                                          |

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Formulation</b>                      | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>                    | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Instruction</b>              | Store at -20°C, and avoid repeat freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Database Links</b>                   | <a href="#">HGNC:29511</a> <a href="#">OMIM:613479</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Alternative Names</b>                | Centrosomal protein of 131 kDa 5-azacytidine-induced protein 1 Pre-acrosome localization protein 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Function</b>                         | <p>Component of centriolar satellites contributing to the building of a complex and dynamic network required to regulate cilia/flagellum formation . In proliferating cells, MIB1-mediated ubiquitination induces its sequestration within centriolar satellites, precluding untimely cilia formation initiation . 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 . Acts also as a negative regulator of BBSome ciliary trafficking . 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 . Required for optimal cell proliferation and cell cycle progression; may play a role in the regulation of genome stability in non-ciliogenic cells . Involved in centriole duplication . Required for CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of CDK2 .</p>                                                                                                                                                                               |
| <b>Cellular Localization</b>            | <p>Cytoplasm, cytoskeleton, microtubule organizing center, centrosome<br/> Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite<br/> Cytoplasm, cytoskeleton, cilium basal body. Cytoplasmic vesicle, secretory vesicle, acrosome. 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) . 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 .</p> |
| <b>Post-translational Modifications</b> | <p>Ubiquitinated. Undergoes monoubiquitination catalyzed by the E3 ubiquitin-protein ligase MIB1 in proliferating cells, preventing cilia formation. Monoubiquitination by MIB1 is inhibited in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock, resulting in cilia formation initiation. MAPKAPK2-dependent phosphorylation at Ser-47 and Ser-78 occurs in response to cellular stress such as exposure to ultraviolet irradiation and promotes binding to 14-3-3 proteins which leads to cytoplasmic</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

sequestration of CEP131 and blocks formation of new centriolar satellites.

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