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Cib1 Antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI12899

Product Information

Application	WB
Primary Accession	Q9R010
Other Accession	NM_031145, NP_112407
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21800

Additional Information

Gene ID	81823
Alias Symbol	Cib, Sip2-28
Other Names	Calcium and integrin-binding protein 1, CIB, Calmyrin, DNA-PKcs-interacting protein, Kinase-interacting protein, KIP, Cib1, Cib, Kip, Prkdcip
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Cib1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Cib1 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Cib1
Synonyms	Cib, Kip, Prkdcip
Function	Calcium-binding protein that plays a role in the regulation of numerous cellular processes, such as cell differentiation, cell division, cell proliferation, cell migration, thrombosis, angiogenesis, cardiac hypertrophy and apoptosis. Involved in bone marrow megakaryocyte differentiation by negatively regulating thrombopoietin- mediated signaling pathway. Participates in the endomitotic cell cycle of megakaryocyte, a form of mitosis in which both karyokinesis and cytokinesis are interrupted. Plays a role in integrin signaling by negatively regulating alpha-IIb/beta3 activation in thrombin-stimulated

megakaryocytes preventing platelet aggregation. Up-regulates PTK2/FAK1 activity, and is also needed for the recruitment of PTK2/FAK1 to focal adhesions; it thus appears to play an important role in focal adhesion formation. Positively regulates cell migration on fibronectin in a CDC42-dependent manner, the effect being negatively regulated by PAK1. Functions as a negative regulator of stress activated MAP kinase (MAPK) signaling pathways. Down-regulates inositol 1,4,5-trisphosphate receptor-dependent calcium signaling. Involved in sphingosine kinase SPHK1 translocation to the plasma membrane in a N-myristoylation- dependent manner preventing TNF-alpha-induced apoptosis. Regulates serine/threonine-protein kinase PLK3 activity for proper completion of cell division progression. Plays a role in microtubule (MT) dynamics during neuronal development; disrupts the MT depolymerization activity of STMN2 attenuating NGF-induced neurite outgrowth and the MT reorganization at the edge of lamellipodia. Promotes cardiomyocyte hypertrophy via activation of the calcineurin/NFAT signaling pathway. Stimulates calcineurin PPP3R1 activity by mediating its anchoring to the sarcolemma. In ischemia-induced (pathological or adaptive) angiogenesis, stimulates endothelial cell proliferation, migration and microvessel formation by activating the PAK1 and ERK1/ERK2 signaling pathway. Also promotes cancer cell survival and proliferation. May regulate cell cycle and differentiation of spermatogenic germ cells, and/or differentiation of supporting Sertoli cells (By similarity). Forms a complex with TMC6/EVER1 and TMC8/EVER2 in lymphocytes and keratynocytes where CIB1 stabilizes TMC6 and TMC8 levels and reciprocally (By similarity).

Cellular Location

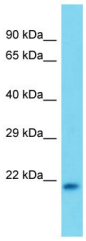
Membrane {ECO:0000250|UniProtKB:Q99828}; Lipid- anchor {ECO:0000250|UniProtKB:Q99828}. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q99828}. Cell membrane {ECO:0000250|UniProtKB:Q99828}. Apical cell membrane {ECO:0000250|UniProtKB:Q99828}. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:Q99828}. Cell projection, filopodium tip {ECO:0000250|UniProtKB:Q99828}. Cell projection, growth cone {ECO:0000250|UniProtKB:Q99828}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q99828}. Cytoplasm {ECO:0000250|UniProtKB:Q99828}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q99828}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q99828} Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q99828}. Nucleus {ECO:0000250|UniProtKB:Q99828}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q99828}. Perikaryon {ECO:0000250|UniProtKB:Q99828}. Note=Colocalized with PPP3R1 at the cell membrane of cardiomyocytes in the hypertrophic heart (By similarity). Colocalized with NBR1 to the perinuclear region Colocalizes with TAS1R2 in apical regions of taste receptor cells Colocalized with RAC3 in the perinuclear area and at the cell periphery. Colocalized with PAK1 within membrane ruffles during cell spreading upon readhesion to fibronectin. Redistributed to the cytoskeleton upon platelet aggregation. Translocates from the cytosol to the plasma membrane in a calcium-dependent manner. Colocalized with PLK3 at centrosomes in ductal breast carcinoma cells.

Tissue Location

Expressed in cardiomyocytes and neurons (at protein level). Expressed during early neural development

Images

Host: Rabbit



Target Name: Cib1
Sample Tissue: Rat Muscle lysates
Antibody Dilution: 1.0µg/ml