

CKIP-1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8500a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q53GL0
Other Accession	A4IFK0
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19797
Calculated MW	46237
Antigen Region	49-77

Additional Information

Gene ID	51177
Other Names	Pleckstrin homology domain-containing family O member 1, PH domain-containing family O member 1, C-Jun-binding protein, JBP, Casein kinase 2-interacting protein 1, CK2-interacting protein 1, CKIP-1, Osteoclast maturation-associated gene 120 protein, PLEKHO1, CKIP1, OC120
Target/Specificity	This CKIP-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 49-77 amino acids from the N-terminal region of human CKIP-1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CKIP-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLEKHO1
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Synonyms	CKIP1, OC120
Function	Plays a role in the regulation of the actin cytoskeleton through its interactions with actin capping protein (CP). May function to target CK2 to the plasma membrane thereby serving as an adapter to facilitate the phosphorylation of CP by protein kinase 2 (CK2). Appears to target ATM to the plasma membrane. Appears to also inhibit tumor cell growth by inhibiting AKT-mediated cell-survival. Also implicated in PI3K-regulated muscle differentiation, the regulation of AP-1 activity (plasma membrane bound AP-1 regulator that translocates to the nucleus) and the promotion of apoptosis induced by tumor necrosis factor TNF. When bound to PKB, it inhibits it probably by decreasing PKB level of phosphorylation.
Cellular Location	Cell membrane; Peripheral membrane protein. Nucleus. Cytoplasm Note=Predominantly localized to the plasma membrane through the binding to phosphatidylinositol 3-phosphate (PubMed:14729969). In C2C12 cells, with the absence of growth factor, it is found in the nucleus (PubMed:14729969). It rapidly translocates to the plasma membrane after insulin stimulation (PubMed:14729969). In response to TNF, it translocates from the plasma membrane to the cytoplasm and then to the nucleus accompanied by cleavage by caspase-3 (PubMed:15706351) However, the subcellular location is highly dependent of the cell type, and this explains why it is found exclusively at the plasma membrane, in some type of cells (Probable). {ECO:0000269 PubMed:14729969, ECO:0000269 PubMed:15706351, ECO:0000305}
Tissue Location	Abundantly expressed in skeletal muscle and heart, moderately in kidney, liver, brain and placenta and sparingly in the pancreas and lung. Easily detectable in cell lines such as MOLT-4, HEK293 and Jurkat.

Background

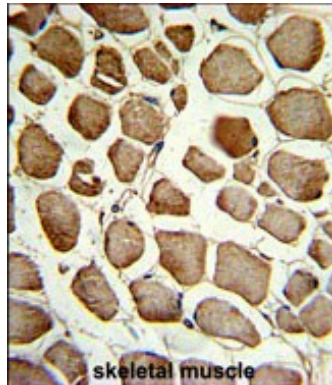
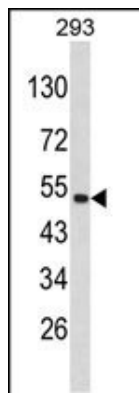
CKIP-1 plays a role in the regulation of the actin cytoskeleton through its interactions with actin capping protein (CP). This protein may function to target CK2 to the plasma membrane thereby serving as an adapter to facilitate the phosphorylation of CP by protein kinase 2 (CK2). It appears to target ATM to the plasma membrane and appears to also inhibit tumor cell growth by inhibiting AKT-mediated cell-survival. Also implicated in PI3K-regulated muscle differentiation, the regulation of AP-1 activity (plasma membrane bound AP-1 regulator that translocates to the nucleus) and the promotion of apoptosis induced by tumor necrosis factor TNF. When bound to PKB, it inhibits it probably by decreasing PKB level of phosphorylation.

References

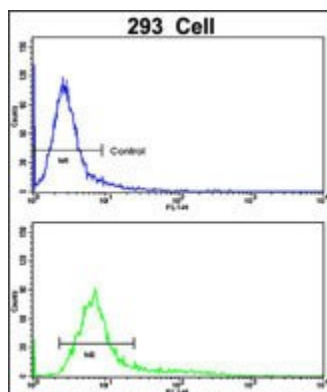
Barrios-Rodiles,M., et.al., Science 307 (5715), 1621-1625 (2005)

Images

Western blot analysis of CKIP-1 Antibody (N-term) (Cat. #AP8500a) in 293 cell line lysates (35ug/lane). CKIP-1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skeletal muscle reacted with CKIP-1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of 293 cells using CKIP-1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.