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PLEKHO1 Rabbit pAb

Catalog # AP99016

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q53GL0
Other Accession	Q53GL0
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46237
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PLEKHO1
Epitope Specificity	51-170/409
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 PH domain.
SUBUNIT	Heterodimer or homodimer.
Post-translational modifications	C-terminal fragments could be released during apoptosis via caspase-3-dependent cleavage.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	51177
Other Names	CKIP-1; CKIP1; JBP; OC120; 2810052M02Rik; JZA-20; Jza2; RGD1311487; PKHO1_HUMAN; PLEKHO1; 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; PKHO1_MOUSE; PKHO1_RAT; pleckstrin homology domain containing O1; pleckstrin homology domain containing, family O member 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C 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 °C.

Protein Information

Name	PLEKHO1
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.

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