

# PLEKHO1 / CKIP-1 Antibody (C-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS13778

# **Specification**

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

Dilution

O53GL0
Human, Mouse, Rat
Rabbit
Polyclonal
46kDa KDa
WB~~1:1000
IHC-P~~N/A
E~~N/A

WB, IHC-P, E

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - 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

Human PLEKHO1

# **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

## **Precautions**

PLEKHO1 / CKIP-1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - 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**

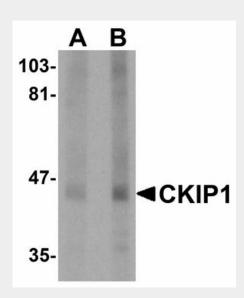
Abundantly expressed in skeletal muscle and heart, moderately in kidney, liver, brain and placenta and sparingly in the pancreas and lung. Easily detectable in cell lines such as MOLT-4, HEK293 and Jurkat.

### PLEKHO1 / CKIP-1 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

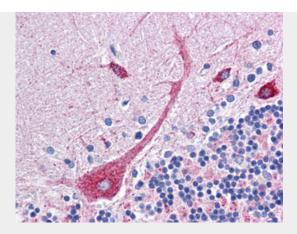
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - Images



Western blot of CKIP1 in human lung tissue lysate with CKIP1 antibody at (A) 1 and (B) 2 ug/ml.





Anti-PLEKHO1 antibody IHC of human brain, cerebellum.

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - Background

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.

# PLEKHO1 / CKIP-1 Antibody (C-Terminus) - References

Kohchi C.,et al.Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases. Yamane S.,et al.Submitted (OCT-1999) to the EMBL/GenBank/DDBJ databases. Bosc D.G.,et al.J. Biol. Chem. 275:14295-14306(2000). Zhang L.,et al.EMBO J. 24:766-778(2005). Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.