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PDLIM4 / RIL Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS15774

Specification

PDLIM4 / RIL Antibody (C-Terminus) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	P50479
Reactivity	**Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Horse, Xenopus, Bovine, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**35kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A**

PDLIM4 / RIL Antibody (C-Terminus) - Additional Information

Gene ID 8572

Other Names
PDZ and LIM domain protein 4, LIM protein RIL, Reversion-induced LIM protein, PDLIM4, RIL

Target/Specificity
Human PDLIM4.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
PDLIM4 / RIL Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PDLIM4 / RIL Antibody (C-Terminus) - Protein Information

Name PDLIM4

Synonyms RIL

Function
[Isoform 1]: Suppresses SRC activation by recognizing and binding to active SRC and facilitating PTPN13-mediated dephosphorylation of SRC 'Tyr-419' leading to its inactivation. Inactivated SRC dissociates from this protein allowing the initiation of a new SRC inactivation cycle (PubMed:19307596). Involved in reorganization of the actin cytoskeleton (PubMed:21636573). In nonmuscle

cells, binds to ACTN1 (alpha-actinin-1), increases the affinity of ACTN1 to F-actin (filamentous actin), and promotes formation of actin stress fibers. Involved in regulation of the synaptic AMPA receptor transport in dendritic spines of hippocampal pyramidal neurons directing the receptors toward an insertion at the postsynaptic membrane. Links endosomal surface-internalized GRIA1-containing AMPA receptors to the alpha-actinin/actin cytoskeleton. Increases AMPA receptor-mediated excitatory postsynaptic currents in neurons (By similarity).

Cellular Location
[Isoform 1]: Cytoplasm, cytoskeleton. Nucleus. Cytoplasm Cytoplasm, perinuclear region. Cell projection, lamellipodium. Cell projection, dendritic spine {ECO:0000250|UniProtKB:P36202}. Early endosome membrane {ECO:0000250|UniProtKB:P36202}; Peripheral membrane protein {ECO:0000250|UniProtKB:P36202}; Cytoplasmic side {ECO:0000250|UniProtKB:P36202}. Recycling endosome membrane {ECO:0000250|UniProtKB:P36202}; Peripheral membrane protein {ECO:0000250|UniProtKB:P36202}; Cytoplasmic side {ECO:0000250|UniProtKB:P36202}. Synapse, synaptosome {ECO:0000250|UniProtKB:P36202}. Note=Localizes to actin stress fibers in nonmuscle cells. Colocalizes with GRIA1 in early endosomes. Enriched in numerous but not all spine-like structures along dendritic branches Colocalizes with actin and enriched at sites containing larger amounts of actin and alpha-actinin. Targeted efficiently to spines via its PDZ domain-mediated interaction with the alpha-actinin/actin cytoskeletal complex. Localizes to synaptosomes in brain (By similarity) Colocalizes with F-actin (PubMed:10826496). Colocalizes with TRIP6 at cell-cell contacts and lamellipodia (PubMed:10826496). In the cytoplasm, displays a fibrillar pattern with characteristic thick fibers and occasional clusters. Colocalizes with the actin stress fibers. Oxidative stress induces redistribution from cytoskeleton to cytosol (PubMed:21636573). Colocalizes with SRC at the perinuclear region, but not at focal adhesions (PubMed:19307596) {ECO:0000250|UniProtKB:P36202, ECO:0000269|PubMed:10826496, ECO:0000269|PubMed:19307596, ECO:0000269|PubMed:21636573}

Tissue Location
[Isoform 2]: Found in brain.

PDLIM4 / RIL 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

PDLIM4 / RIL Antibody (C-Terminus) - Images

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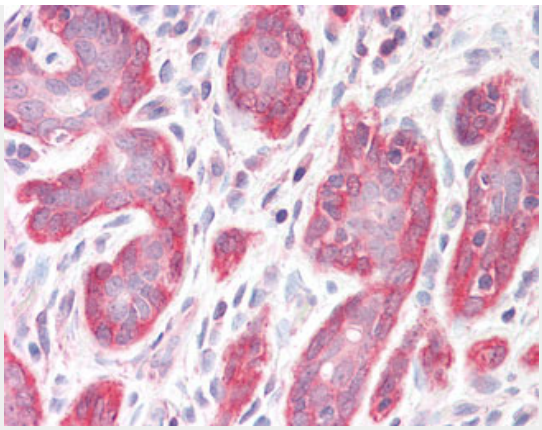

Anti-PDLIM4 / RIL antibody IHC staining of human breast.

PDLIM4 / RIL Antibody (C-Terminus) - References

Scharm B.,et al.Submitted (OCT-1995) to the EMBL/GenBank/DDBJ databases.
Bashirova A.A.,et al.Gene 210:239-245(1998).
Bashirova A.A.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.