

Rabbit PDZK1 Polyclonal Antibody | anti-PDZK1 antibody

PDZK1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326976	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

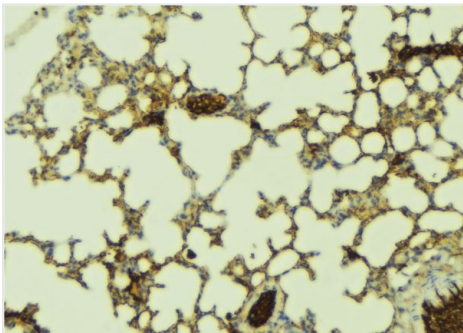
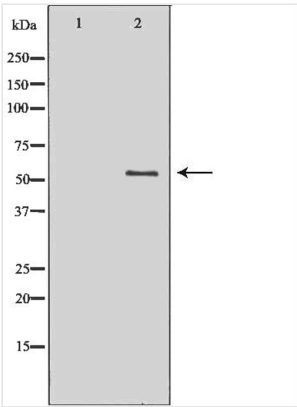
PRODUCT SYNONYMS

PDZK1; Polyclonal Antibody; PDZK1 Antibody; 1700023D20Rik; 2610507N21Rik; 4921513F16Rik; AI267131; AI314638; AL022680; C terminal linking and modulating protein; CAP70; CFTR associated protein of 70 kDa; CFTR associated protein; 70-KD; CFTR-associated protein of 70 kDa; CLAMP; D3Ert537e; Dietary Pi-regulated RNA-1; Diphor-1; mPDZK1; Na(+)/H(+) exchange regulatory cofactor NHE-RF3; Na(+)/H(+) exchanger regulatory factor 3; Na/Pi cotransporter C-terminal-associated protein 1; Na/Pi cotransporter C-terminal-associated protein; NaPi Cap1; NaPi-Cap1; NaPiCap1; NHERF 3; NHERF-3; NHERF3; NHERF3_HUMAN; OTTHUMP00000015572; PDZ domain containing 1; PDZ domain containing protein 1; PDZ domain-containing protein 1; PDZD1; Sodium hydrogen exchanger regulatory factor 3; Sodium-hydrogen exchanger regulatory factor 3; anti-PDZK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PDZK1 antibody detects endogenous levels of total PDZK1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	519
Applicable Applications for anti-PDZK1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PDZK1
Subcellular Location	Cytoplasm. Membrane. Associated with peripheral membranes. Localizes to the apical compartment of proximal tubular cells and to sinusoidal liver membranes.
Tissue Specificity	Expression is limited to epithelial cells. Expressed in the kidney (brush border of proximal tubule), pancreas, liver, and small intestine. Expressed at a lower level in the adrenal cortex, testis and stomach. Overexpressed in breast, renal and lung carcinomas.
Predicted Cross Reactivity	Bovine, Sheep, Rabbit, Dog
Similarity	Bovine (100%), Sheep (100%), Rabbit (100%), Dog (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326976 at 1/100 staining Mouse lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of A549 whole cell lysates, using PDZK1 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PDZK1 antibody

Description: This gene encodes a PDZ domain-containing scaffolding protein. PDZ domain-containing molecules bind to and mediate the subcellular localization of target proteins. The encoded protein mediates the localization of cell surface proteins and plays a critical role in cholesterol metabolism by regulating the HDL receptor, scavenger receptor class B type 1. Single nucleotide polymorphisms in this gene may be associated with metabolic syndrome, and overexpression of this gene may play a role in drug resistance of multiple myeloma. Pseudogenes of this gene are located on the long arm of chromosome 1. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

Function: A scaffold protein that connects plasma membrane proteins and regulatory components, regulating their surface expression in epithelial cells apical domains. May be involved in the coordination of a diverse range of regulatory processes for ion transport and second messenger cascades. In complex with SLC9A3R1, may cluster proteins that are functionally dependent in a mutual fashion and modulate the trafficking and the activity of the associated membrane proteins. May play a role in the cellular mechanisms associated with multidrug resistance through its interaction with ABCC2 and PDZK1IP1. May potentiate the CFTR chloride channel activity. Required for normal cell-surface expression of SCARB1. Plays a role in maintaining normal plasma cholesterol levels via its effects on SCARB1. Plays a role in the normal localization and function of the chloride-anion exchanger SLC26A6 to the plasma membrane in the brush border of the proximal tubule of the kidney. May be involved in the regulation of proximal tubular Na⁺-dependent inorganic phosphate cotransport therefore playing an important role in tubule function (By similarity).

Subunit Structure: Interacts with PDZK1IP1 and ABCC2. Interacts (via PDZ domains 1 and 3) with SCARB1 (C-terminal domain). Forms a heterodimeric complex with SLC9A3R1. Interacts with AKAP2, BCR, CFTR, SLC22A12, SLC22A4, SLC22A5, SLC9A3R2 and SLC17A1. Component of a complex, composed of PDZK1, SYNGAP1, KLHL17 and NMDA receptors. Interacts (via PDZ1 domain) directly with KLHL17; the interaction is important for integrity of actin cytoskeleton structures in neurons. Interacts (via the first PDZ domain) with PTGIR (via non-isoprenylated C-terminus) (By similarity). Interacts (via C-terminal PDZ domain) with SLC26A6 (via C-terminal domain) (By similarity). Interacts (via C-terminal PDZ domain) with SLC9A3 (via C-terminal domain).

Similarity: The PDZ 2 and 3 domains seem to be involved in the interaction with SLC26A3. Interaction with the C-terminus of CFTR could be mediated through independent binding of PDZ 1, 3 and 4 domains. The PDZ 1 and 3 domains seem to be involved in the interaction with SLC01A1. The PDZ 1 domain interacts with BCR. The PDZ 2 and 4 domains do not interact with the C-terminal region of SCARB1. Belongs to the NHER family.

References	Ying-yuLu, JianLiang, Shu-XianChen, Bing-xinWang, HanYuan, Can-taoLi, Ya-yunWu, Yan-fangWu, Xu-guangShi, JieGao, Shao-zhenHou; Journal: J FUNCT FOODS. Phloridzin alleviate colitis in mice by protecting the intestinal brush border and improving the expression of sodium glycogen transporter 1.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	318037203
NCBI GeneID	5174
NCBI Accession #	NP_001188254.1

NCBI GenBank Nucleotide #	NM_001201325.1
UniProt Accession #	Q5T2W1 ; O60450 ; Q5T5P6 ; Q9BQ41 ; B4DPB9 ; E7EU02
Molecular Weight	Observed: 57 kDa Predicted: 58 kDa
NCBI Official Full Name	Na(+)/H(+) exchange regulatory cofactor NHE-RF3 isoform 1
NCBI Official Synonym Full Names	PDZ domain containing 1
NCBI Official Symbol	PDZK1
NCBI Official Synonym Symbols	CAP70; CLAMP; PDZD1; NHERF3; NHERF-3
NCBI Protein Information	Na(+)/H(+) exchange regulatory cofactor NHE-RF3
UniProt Protein Name	Na(+)/H(+) exchange regulatory cofactor NHE-RF3
UniProt Gene Name	PDZK1
UniProt Synonym Gene Names	CAP70; NHERF3; PDZD1; NHERF-3; NaPi-Cap1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/pdzk1-antibody-immunohistochemistry-western-blot-elisa/326976>