

PDZK1 Antibody (clone AT1A2)
Mouse Monoclonal Antibody
Catalog # ALS16628**Specification**

PDZK1 Antibody (clone AT1A2) - Product Information

Application	IHC, WB
Primary Accession	Q5T2W1
Other Accession	5174
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b,k
Calculated MW	57129

PDZK1 Antibody (clone AT1A2) - Additional Information**Gene ID** 5174**Other Names**

PDZK1, CAP70, CLAMP, NHERF-3, PDZD1, PDZ domain containing 1, NaPi-Cap1, NHERF3

Target/Specificity

Human PDZK1

Reconstitution & Storage

Supplied in PBS, pH 7.4, 10% glycerol, 0.02% sodium azide. Can be stored at 4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

Precautions

PDZK1 Antibody (clone AT1A2) is for research use only and not for use in diagnostic or therapeutic procedures.

PDZK1 Antibody (clone AT1A2) - Protein Information**Name** PDZK1**Synonyms** CAP70, NHERF3, PDZD1**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 NHERF1, 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).

Cellular Location

Membrane {ECO:0000250|UniProtKB:Q9JJ40}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JJ40}. Cell membrane {ECO:0000250|UniProtKB:Q9JIL4}. Note=Associated with peripheral membranes. Localizes to the apical compartment of proximal tubular cells and to sinusoidal liver membranes {ECO:0000250|UniProtKB:Q9JJ40}

Tissue Location

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.

Volume

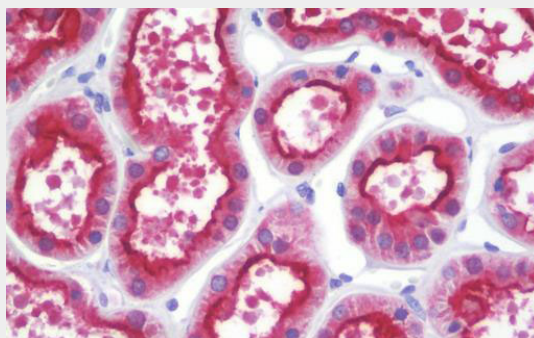
50 µl

PDZK1 Antibody (clone AT1A2) - Protocols

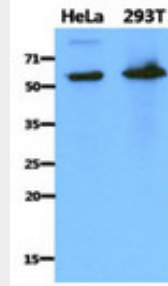
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PDZK1 Antibody (clone AT1A2) - Images



Anti-PDZK1 antibody IHC staining of human kidney.



Western Blot: The cell lysates of HeLa (40 ug) and 293T (40 ug) were resolved by SDS-PAGE,...

PDZK1 Antibody (clone AT1A2) - Background

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).

PDZK1 Antibody (clone AT1A2) - References

Kocher O., et al. Lab. Invest. 78:117-125(1998).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Gregory S.G., et al. Nature 441:315-321(2006).
Kocher O., et al. Lab. Invest. 79:1161-1170(1999).
Wang S., et al. Cell 103:169-179(2000).