

STK39 Antibody
Rabbit mAb
Catalog # AP92520

Specification

STK39 Antibody - Product Information

Application **WB, IHC, FC**
Primary Accession [O9UEW8](#)
Clonality **Monoclonal**
Other Names
DCHT; PASK; SPAK; Stk39;

Isotype **Rabbit IgG**
Host **Rabbit**
Calculated MW **59474 Da**

STK39 Antibody - Additional Information

Purification **Affinity-chromatography**
Immunogen **A synthesized peptide derived from human STK39**
Description **May act as a mediator of stress-activated signals.**
Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

STK39 Antibody - Protein Information

Name STK39

Function

Effector serine/threonine-protein kinase component of the WNK-SPAK/OSR1 kinase cascade, which is involved in various processes, such as ion transport, response to hypertonic stress and blood pressure (PubMed: [16669787](http://www.uniprot.org/citations/16669787) target="_blank">16669787, PubMed: [18270262](http://www.uniprot.org/citations/18270262) target="_blank">18270262, PubMed: [21321328](http://www.uniprot.org/citations/21321328) target="_blank">21321328, PubMed: [34289367](http://www.uniprot.org/citations/34289367) target="_blank">34289367). Specifically recognizes and binds proteins with a RFXV motif (PubMed: [16669787](http://www.uniprot.org/citations/16669787) target="_blank">16669787, PubMed: [21321328](http://www.uniprot.org/citations/21321328) target="_blank">21321328). Acts downstream of WNK kinases (WNK1, WNK2, WNK3 or WNK4): following activation by WNK kinases, catalyzes phosphorylation of ion cotransporters, such as SLC12A1/NKCC2, SLC12A2/NKCC1, SLC12A3/NCC, SLC12A5/KCC2 or SLC12A6/KCC3, regulating their activity (PubMed: [21321328](http://www.uniprot.org/citations/21321328) target="_blank">21321328). Mediates regulatory volume increase in response to hyperosmotic stress by catalyzing phosphorylation of ion cotransporters SLC12A1/NKCC2, SLC12A2/NKCC1 and SLC12A6/KCC3

downstream of WNK1 and WNK3 kinases (PubMed:12740379, PubMed:16669787, PubMed:21321328).

Phosphorylation of Na-K-Cl cotransporters SLC12A2/NKCC1 and SLC12A2/NKCC1 promote their activation and ion influx; simultaneously, phosphorylation of K-Cl cotransporters SLC12A5/KCC2 and SLC12A6/KCC3 inhibit their activity, blocking ion efflux (PubMed:16669787, PubMed:19665974, PubMed:21321328). Acts as a regulator of NaCl reabsorption in the distal nephron by mediating phosphorylation and activation of the thiazide-sensitive Na-Cl cotransporter SLC12A3/NCC in distal convoluted tubule cells of kidney downstream of WNK4 (PubMed:18270262). Mediates the inhibition of SLC4A4, SLC26A6 as well as CFTR activities (By similarity). Phosphorylates RELT (By similarity).

Cellular Location

Cytoplasm. Nucleus. Note=Nucleus when caspase-cleaved.

Tissue Location

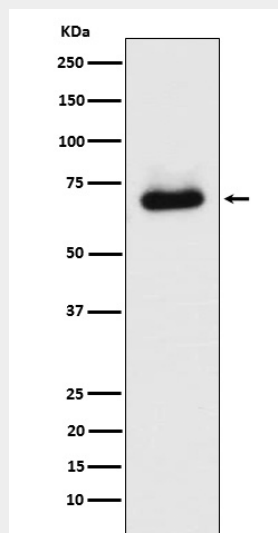
Predominantly expressed in brain and pancreas followed by heart, lung, kidney, skeletal muscle, liver, placenta and testis.

STK39 Antibody - 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](#)

STK39 Antibody - Images



Western blot analysis of STK39 expression in HepG2 cell lysate.