

Mouse Stk39 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17317b

Specification

Mouse Stk39 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O9Z1W9
Other Accession	NP_058562.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60320
Antigen Region	433-460

Mouse Stk39 Antibody (C-term) - Additional Information

Gene ID 53416

Other Names

STE20/SPS1-related proline-alanine-rich protein kinase, Ste-20-related kinase,
Serine/threonine-protein kinase 39, Stk39, Spak

Target/Specificity

This Mouse Stk39 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 433-460 amino acids from the C-terminal region of mouse Stk39.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Stk39 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Stk39 Antibody (C-term) - Protein Information

Name Stk39

Synonyms Spak

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:[16382158](#), PubMed:[17488636](#), PubMed:[19633012](#), PubMed:[21486947](#)). Specifically recognizes and binds proteins with a RFXV motif (PubMed:[14563843](#)). 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:[14563843](#), PubMed:[16382158](#), PubMed:[17488636](#), PubMed:[19633012](#), PubMed:[21486947](#)). 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 (By similarity). 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 (By similarity). 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:[17488636](#), PubMed:[19633012](#), PubMed:[21486947](#)). Mediates the inhibition of SLC4A4, SLC26A6 as well as CFTR activities (PubMed:[21317537](#), PubMed:[23542070](#)). Phosphorylates RELT (PubMed:[16530727](#)).

Cellular Location

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

Tissue Location

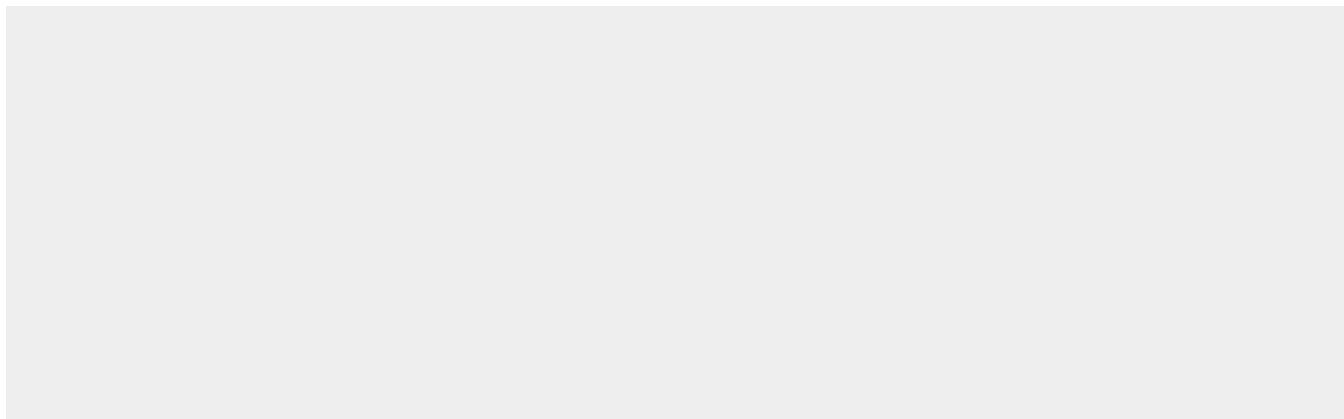
Expressed in the kidney, including in epithelial cells of the thick ascending limb of Henle's loop and in the distal convoluted tubule (at protein level).

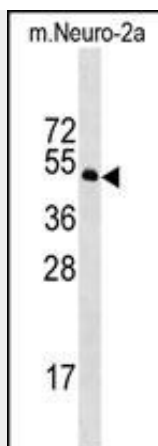
Mouse Stk39 Antibody (C-term) - Protocols

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](#)

Mouse Stk39 Antibody (C-term) - Images





Mouse Stk39 Antibody (C-term) (Cat. #AP17317b) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the Stk39 antibody detected the Stk39 protein (arrow).

Mouse Stk39 Antibody (C-term) - Background

Stk39 may act as a mediator of stress-activated signals.

Mouse Stk39 Antibody (C-term) - References

Yang, S.S., et al. J. Am. Soc. Nephrol. 21(11):1868-1877(2010)
Gagnon, K.B., et al. Am. J. Physiol., Cell Physiol. 299 (3), C614-C620 (2010) :
Sid, B., et al. J. Physiol. (Lond.) 588 (PT 13), 2315-2328 (2010) :
Reiche, J., et al. Mol. Cell. Biol. 30(12):3027-3037(2010)
Hengl, T., et al. Proc. Natl. Acad. Sci. U.S.A. 107(13):6052-6057(2010)