

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

**Specification**

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**Mouse Stk39 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9Z1W9</a>
Other Accession	<a href="#">NP_058562.1</a>
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

**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**

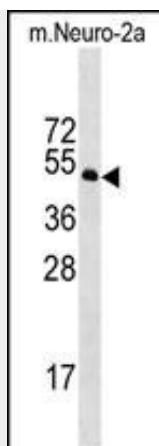
Expressed in the kidney, including in epithelial cells of the thick ascending limb of Henle's loop and in the distal convoluted tubule (at protein level).

**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)