10320 Camino Santa Fe, Suite G
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Mouse Map2k4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14920b

Specification

Mouse Map2k4 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P47809
Other Accession	P45985, Q07192, NP_033183.1, Q9DGR7
Reactivity	**Human, Mouse, Zebrafish**
Predicted	**Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**44114**
Antigen Region	**259-287**

Mouse Map2k4 Antibody (C-term) - Additional Information

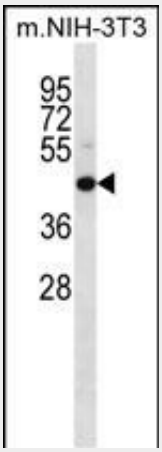
Gene ID 26398

Other Names
Dual specificity mitogen-activated protein kinase kinase 4, MAP kinase kinase 4, MAPKK 4, C-JUN N-terminal kinase kinase 1, JNK kinase 1, JNKK 1, JNK-activating kinase 1, MAPK/ERK kinase 4, MEK 4, SAPK/ERK kinase 1, SEK1, Map2k4, Jnkk1, Mek4, Mkk4, Prkmk4, Sek1, Serk1, Skk1

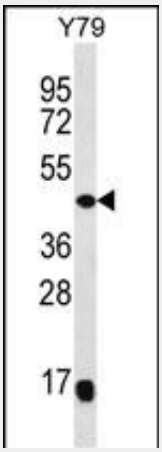
Target/Specificity
This Mouse Map2k4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 259-287 amino acids from the C-terminal region of mouse Map2k4.

Dilution
WB~~1:1000
IHC-P~~1:10~50

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



Mouse Map2k4 Antibody (C-term) (Cat. #AP14920b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Map2k4 antibody detected the Map2k4 protein (arrow).



Mouse Map2k4 Antibody (C-term) (Cat. #AP14920b) western blot analysis in Y79 cell line lysates (35ug/lane).This demonstrates the Map2k4 antibody detected the Map2k4 protein (arrow).

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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.

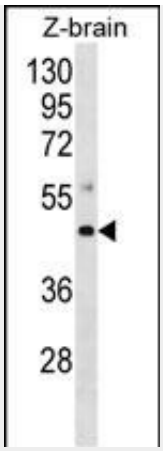
Precautions
Mouse Map2k4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Map2k4 Antibody (C-term) - Protein Information

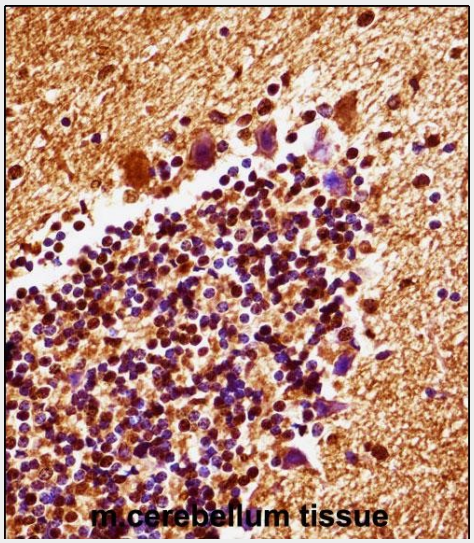
Name Map2k4

Synonyms Jnkk1, Mek4, Mkk4, Prkmk4, Sek1, Serk1,

Function
Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Essential component of the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. With MAP2K7/MKK7, is the one of the only known kinase to directly activate the stress-activated protein kinase/c-Jun N-terminal kinases MAPK8/JNK1, MAPK9/JNK2 and MAPK10/JNK3. MAP2K4/MKK4 and MAP2K7/MKK7 both activate the JNKs by phosphorylation, but they differ in their preference for the phosphorylation site in the Thr-Pro-Tyr motif. MAP2K4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The phosphorylation of the Thr residue by MAP2K7/MKK7 seems to be the prerequisite for JNK activation at least in response to proinflammatory cytokines, while other stimuli activate both MAP2K4/MKK4 and MAP2K7/MKK7 which synergistically phosphorylate JNKs. MAP2K4 is required for maintaining peripheral lymphoid homeostasis. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis. Whereas MAP2K7/MKK7 exclusively activates JNKs, MAP2K4/MKK4 additionally activates the p38 MAPKs MAPK11, MAPK12, MAPK13 and MAPK14.



Mouse Map2k4 Antibody (C-term) (Cat. #AP14920b) western blot analysis in zebra fish brain tissue lysates (35ug/lane).This demonstrates the Mouse Map2k4 antibody detected the Mouse Map2k4 protein (arrow).



Mouse Map2k4 Antibody (C-term) (AP14920b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Map2k4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Map2k4 Antibody (C-term) - Background

Dual specificity kinase that activates the JUN kinases MAPK8 (JNK1) and MAPK9 (JNK2) as well as MAPK14 (p38) but not MAPK1 (ERK2) or MAPK3 (ERK1).

Cellular Location
Cytoplasm. Nucleus

Tissue Location
Strong expression is detected in most of the central nervous system and in liver and thymus during early stages of development. While expression in nervous system increases over time, expression in fetal liver and thymus gradually decreases as embryogenesis proceeds. High level of expression in the central nervous system persists throughout postnatal development and remained at a stable level in adult brain.

Mouse Map2k4 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 Cytomety
- Cell Culture

Mouse Map2k4 Antibody (C-term) - References

Finegan, K.G., et al. Cancer Res. 70(14):5797-5806(2010)
Ahn, Y.H., et al. J. Biol. Chem. 284(43):29399-29404(2009)
Bogani, D., et al. PLoS Biol. 7 (9), E1000196 (2009) :
Liu, W., et al. Circ. Res. 104(7):905-914(2009)
Bulat, N., et al. J. Lipid Res. 50(1):81-89(2009)