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Mouse Map2k4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14920b

Product Information

Application	WB, IHC-P, E
Primary Accession	P47809
Other Accession	P45985, Q07192, NP_033183.1
Reactivity	Human, Mouse, Zebrafish
Predicted	Xenopus, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35403
Calculated MW	44114
Antigen Region	259-287

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~~1:100~500 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 Map2k4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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 pro-inflammatory 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.
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.

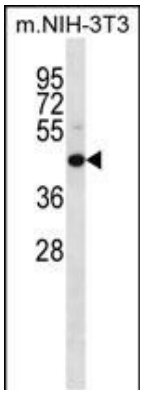
Background

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).

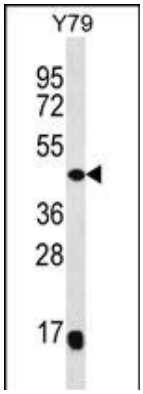
References

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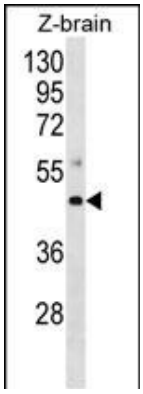
Images



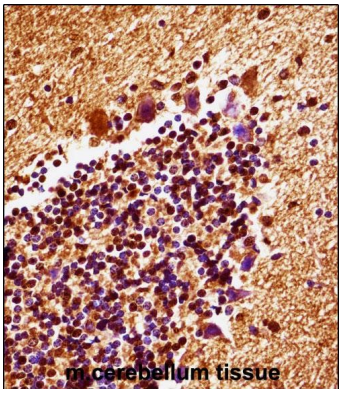
Mouse Map2k4 Antibody (C-term) (Cat. #AP14920b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Map2k4 antibody detected the Map2k4 protein (arrow).



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).



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.