

ARG56222 anti-MEK7 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MEK7
Tested Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MEK7
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 363-396 of Human MEK7.
Conjugation	Un-conjugated
Alternate Names	c-Jun N-terminal kinase kinase 2; MEK; MEK 7; JNK-activating kinase 2; MAPKK 7; SAPK kinase 4; EC 2.7.12.2; PRKMK7; JNKK 2; JNK kinase 2; SAPKK-4; SAPKK4; MAPKK7; MAPK/ERK kinase 7; JNKK2; MAP kinase kinase 7; Stress-activated protein kinase kinase 4; MKK7; Dual specificity mitogen-activated protein kinase kinase 7

Application Instructions

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	

Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 5609 Human Swiss-port # O14733 Human
Gene Symbol	MAP2K7
Gene Full Name	mitogen-activated protein kinase kinase 7
Background	The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically activates MAPK8/JNK1 and MAPK9/JNK2, and this kinase itself is phosphorylated and activated by MAP kinase kinase kinases including MAP3K1/MEKK1, MAP3K2/MEKK2, MAP3K3/MEKK5, and MAP4K2/GCK. This kinase is involved in the signal transduction mediating the cell responses to proinflammatory cytokines, and environmental stresses. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2014]
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 MAP2K4/MKK4, 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/MKK4 shows preference for phosphorylation of the Tyr residue and MAP2K7/MKK7 for the Thr residue. The monophosphorylation of JNKs on the Thr residue is sufficient to increase JNK activity indicating that MAP2K7/MKK7 is important to trigger JNK activity, while the additional phosphorylation of the Tyr residue by MAP2K4/MKK4 ensures optimal JNK activation. Has a specific role in JNK signal transduction pathway activated by proinflammatory cytokines. The MKK/JNK signaling pathway is also involved in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis. [UniProt]
Calculated Mw	47 kDa
PTM	Activated by phosphorylation on Ser-271 and Thr-275 by MAP kinase kinase kinases (MAP3Ks).

Images



HeLa

ARG56222 anti-MEK7 antibody WB image

Western blot: 20 µg of HeLa cell lysate stained with ARG56222 anti-MEK7 antibody at 1:2000 dilution.