

ARG59028 anti-MAPK13 / SAPK4 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MAPK13 / SAPK4
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Bov
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MAPK13 / SAPK4
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 343-360 of Human SAPK4 (YKEIVNFSPARKDSRRR).
Conjugation	Un-conjugated
Alternate Names	p38delta; Mitogen-activated protein kinase p38 delta; EC 2.7.11.24; PRKM13; MAP kinase 13; Stress-activated protein kinase 4; MAPK-13; SAPK4; Mitogen-activated protein kinase 13; MAPK 13; MAP kinase p38 delta

Application Instructions

Application table	Application	Dilution
	WB	0.1 - 0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

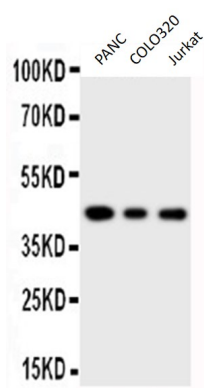
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
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 or below. 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

Gene Symbol	MAPK13
Gene Full Name	mitogen-activated protein kinase 13
Background	<p>This gene encodes a member of the mitogen-activated protein (MAP) kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The encoded protein is a p38 MAP kinase and is activated by proinflammatory cytokines and cellular stress. Substrates of the encoded protein include the transcription factor ATF2 and the microtubule dynamics regulator stathmin. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Jul 2012]</p>
Function	<p>Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK13 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK13 is one of the less studied p38 MAPK isoforms. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional targets. Plays a role in the regulation of protein translation by phosphorylating and inactivating EEF2K. Involved in cytoskeletal remodeling through phosphorylation of MAPT and STMN1. Mediates UV irradiation induced up-regulation of the gene expression of CXCL14. Plays an important role in the regulation of epidermal keratinocyte differentiation, apoptosis and skin tumor development. Phosphorylates the transcriptional activator MYB in response to stress which leads to rapid MYB degradation via a proteasome-dependent pathway. MAPK13 also phosphorylates and down-regulates PRKD1 during regulation of insulin secretion in pancreatic beta cells. [UniProt]</p>
Calculated Mw	42 kDa
PTM	<p>Dually phosphorylated on Thr-180 and Tyr-182 by MAP2K3/MKK3, MAP2K4/MKK4, MAP2K6/MKK6 and MAP2K7/MKK7, which activates the enzyme. Dephosphorylated by dual specificity phosphatase DUSP1. [UniProt]</p>

Images



ARG59028 anti-MAPK13 / SAPK4 antibody WB image

Western blot: PANC, COLO320 and Jurkat cell lysates stained with ARG59028 anti-MAPK13 / SAPK4 antibody.