ARG58432
anti-MAP3K8 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MAP3K8
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MAP3K8
Species	Human
Immunogen	Human MAP3K8 recombinant protein (Position: D9-L193). Human MAP3K8 shares 89.7% and 90.3% amino acid (aa) sequence identity with Mouse and Rat MAP3K8, respectively.
Conjugation	Un-conjugated
Alternate Names	Serine/threonine-protein kinase cot; ESTF; EST; AURA2; COT; Mitogen-activated protein kinase kinase kinase 8; Tpl-2; EC 2.7.11.25; Cancer Osaka thyroid oncogene; TPL2; TPL-2; Proto-oncogene c-Cot; c-COT; MEKK8; Tumor progression locus 2

Application Instructions

Application table

Application	Dilution
IHC-P	0.5 - 1 µg/ml

Application Note: IHC-P: Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

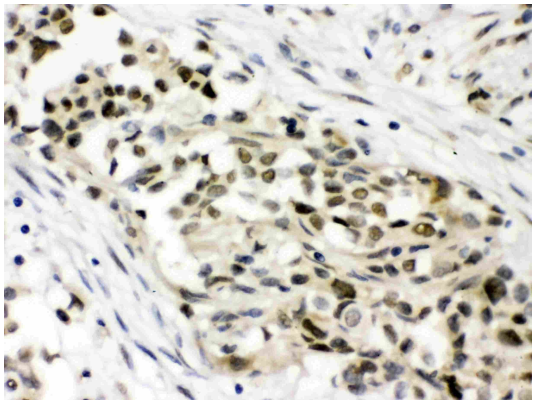
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.
Preservative	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

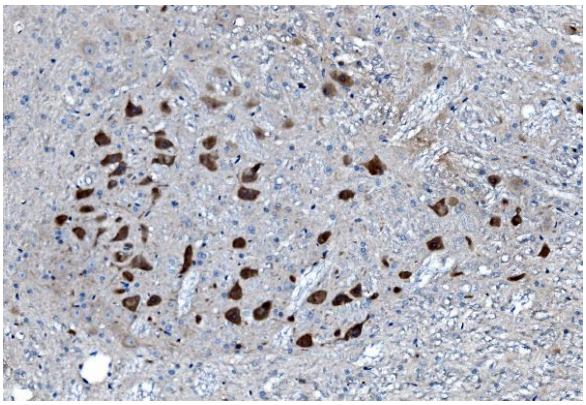
Gene Symbol	MAP3K8
Gene Full Name	mitogen-activated protein kinase kinase kinase 8
Background	This gene is an oncogene that encodes a member of the serine/threonine protein kinase family. The encoded protein localizes to the cytoplasm and can activate both the MAP kinase and JNK kinase pathways. This protein was shown to activate IkappaB kinases, and thus induce the nuclear production of NF-kappaB. This protein was also found to promote the production of TNF-alpha and IL-2 during T lymphocyte activation. This gene may also utilize a downstream in-frame translation start codon, and thus produce an isoform containing a shorter N-terminus. The shorter isoform has been shown to display weaker transforming activity. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2011]
Function	Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the proinflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells. Involved in mediating host resistance to bacterial infection through negative regulation of type I interferon (IFN) production. In vitro, activates MAPK/ERK pathway in response to IL1 in an IRAK1-independent manner, leading to up-regulation of IL8 and CCL4. Transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production. May also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, activates MAPK/ERK pathway in an IKBKB-dependent manner in response to IL1B and TNF, but not insulin, leading to induction of lipolysis. Plays a role in the cell cycle. Isoform 1 shows some transforming activity, although it is much weaker than that of the activated oncogenic variant. [UniProt]
Calculated Mw	53 kDa
PTM	Autophosphorylated. Isoform 1 undergoes phosphorylation mainly on Ser residues, and isoform 2 on both Ser and Thr residues. Thr-290 is autophosphorylated (PubMed:19754427) and/or transphosphorylated (PubMed:15466476); the phosphorylation is necessary but not sufficient for full kinase activity in vitro and for the dissociation of isoform 1 from NFKB1, leading to its degradation. Ser-400 is autophosphorylated (PubMed:19754427) and/or transphosphorylated by IKBKB (PubMed:22988300); the phosphorylation is required for LPS-stimulated activation of the MAPK/ERK pathway in macrophages. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

Images



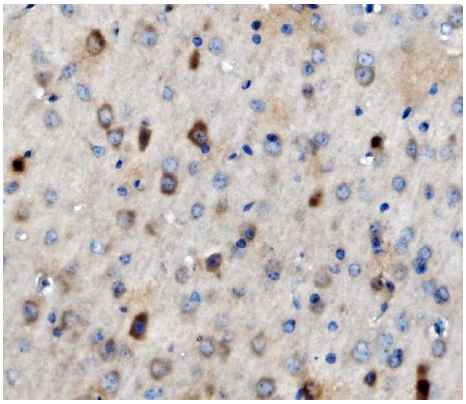
ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancers stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution.



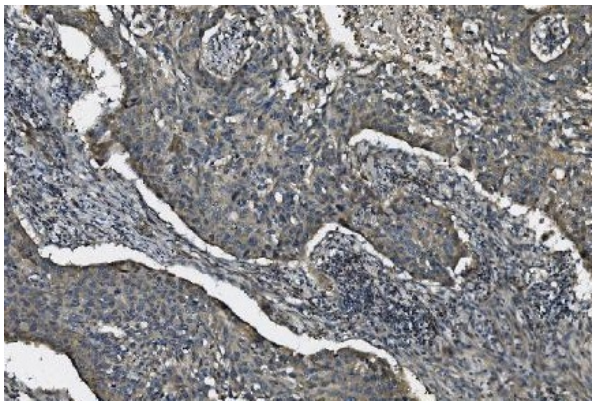
ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution, overnight at 4°C.



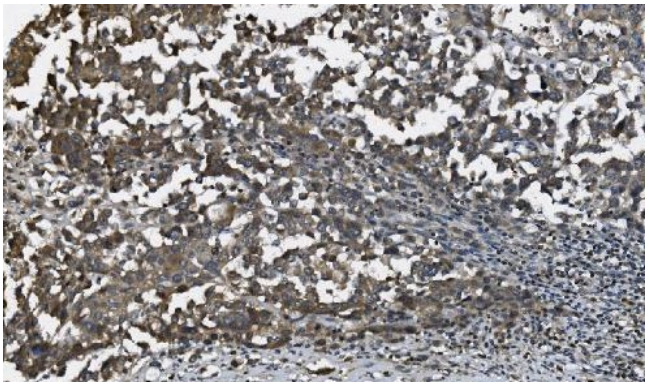
ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse brain tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution, overnight at 4°C.



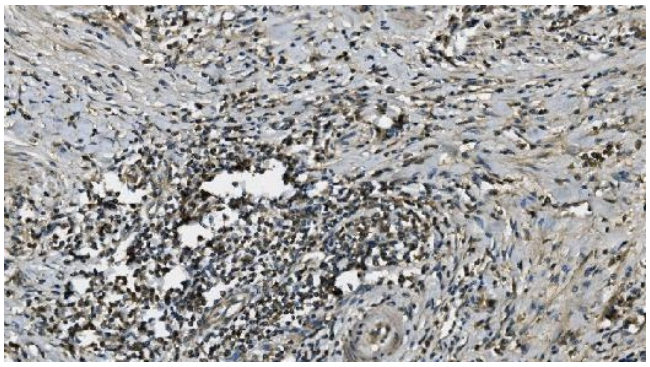
ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human pancreatic cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG58432 anti-MAP3K8 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human rectal cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58432 anti-MAP3K8 antibody at 1 µg/ml dilution, overnight at 4°C.