

Rabbit MAP3K8/COT Polyclonal Antibody | anti-MAP3K8/COT antibody

Phospho-MAP3K8/COT (Ser400) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329930	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (86%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

MAP3K8/COT; Polyclonal Antibody; Phospho-MAP3K8/COT (Ser400) Antibody; AURA2; c COT; Cancer Osaka thyroid oncogene; CCOT; COT; COT proto oncogene serine/threonine protein kinase; EST; ESTF; Ewing sarcoma transformant; FLJ10486; M3K8_HUMAN; MAP3K 8; MAP3K8; MEKK8; Mitogen activated protein kinase kinase kinase 8; Mitogen-activated protein kinase kinase kinase 8; Proto oncogene cCot; Proto-oncogene c-Cot; Serine/threonine protein kinase cot; Serine/threonine-protein kinase cot; TPL 2; TPL-2; TPL2; Tumor progression locus 2; anti-MAP3K8/COT antibody

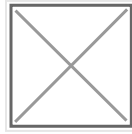
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Zebrafish (86%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-MAP3K8/COT (Ser400) Antibody detects endogenous levels of MAP3K8/COT only when phosphorylated at Ser400. Tissue Specificity: Expressed in several normal tissues and human tumor-derived cell lines.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-MAP3K8/COT antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MAP3K8/COT around the phosphorylation site of Ser400.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Autophosphorylated. Isoform 1 undergoes phosphorylation mainly on Ser residues, and isoform 2 on both Ser and Thr residues. Phosphorylated on Thr-290; 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. Phosphorylated on Ser-400 by IKBKB; the phosphorylation is required for LPS-stimulated activation of the MAPK/ERK pathway in macrophages.
Subunit Structure	Forms a ternary complex with NFKB1/p105 and TNIP2. Interacts with NFKB1; the interaction increases the stability of MAP3K8 but inhibits its MEK phosphorylation activity, whereas loss of interaction following LPS stimulation leads to its degradation. Interacts with CD40 and TRAF6; the interaction is required for ERK activation. Interacts with KSR2; the interaction inhibits ERK and NF-kappa-B activation.
Similarity	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.
Subcellular Location	Cytoplasm.

Preparation and Storage

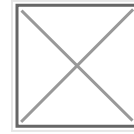
Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

Staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of Cot (Phospho-Ser400) using 293 whole cell lysates. -/+ means absence or presence of N peptide (1/4 non-phospho peptide) and P peptide (phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-MAP3K8/COT antibody

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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	346644795
NCBI GeneID	1326
NCBI Accession #	NP_001231063.1
NCBI GenBank Nucleotide #	NM_001244134.1
UniProt Accession #	P41279; Q14275; Q5T855; Q9HC81; A8K2Q5; D3DRX1
Molecular Weight	52,925 Da
NCBI Official Full Name	mitogen-activated protein kinase kinase kinase 8
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase kinase 8
NCBI Official Symbol	MAP3K8
NCBI Official Synonym Symbols	COT; EST; ESTF; TPL2; MEKK8; Tpl-2; c-COT
NCBI Protein Information	mitogen-activated protein kinase kinase kinase 8; proto-oncogene c-Cot; tumor progression locus 2; Ewing sarcoma transformant; cot (cancer Osaka thyroid) oncogene; proto-oncogene serine/threonine protein kinase
UniProt Protein Name	Mitogen-activated protein kinase kinase kinase 8
UniProt Gene Name	MAP3K8
UniProt Synonym Gene Names	COT; ESTF; TPL-2
UniProt Entry Name	M3K8_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

