



Cot (phospho Thr290) Polyclonal Antibody

Catalog No	YP-Ab-14511
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MAP3K8
Immunogen	The antiserum was produced against synthesized peptide derived from human COT around the phosphorylation site of Thr290. AA range:256-305
Specificity	Phospho-Cot (T290) Polyclonal Antibody detects endogenous levels of Cot protein only when phosphorylated at T290.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COT;EC:2.3.1.137;Peroxisomal carnitine O-octanoyltransferase;MAP3K8; Mitogen-activated protein kinase kinase kinase 8;ESTF;Cancer Osaka thyroid oncogene;Proto-oncogene c-Cot;Serine/threonine-protein kinase cot;Tumor progression locus 2;TPL-2
Observed Band	60kD
Calculated Molecular Weight	60kD
Cell Pathway	Cytoplasm .
Tissue Specificity	Expressed in several normal tissues and human tumor-derived cell lines.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium.,developmental stage:Isoform 1 is activated specifically during the S and G2/M phases of the cell cycle.,function:Required for TLR4 activation of the MEK/ERK pathway. Able to activate NF-kappa-B 1 by stimulating proteasome-mediated proteolysis of NF-kappa-B 1/p105. Plays a role in the cell cycle. The longer form has some transforming activity, although it is much weaker than the activated cot oncoprotein.,PTM:Autophosphorylated.



Isoform 1 undergoes phosphorylation mainly on Ser residues, and isoform 2 on both Ser and Thr residues.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily., similarity:Contains 1 protein kinase domain.,subunit:Forms a ternary complex with NFKB1 and TNIP2.,tissue specificity:Expressed in several normal tissues and

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],

matters needing attention

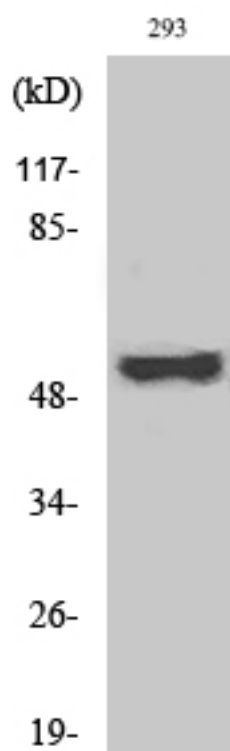
Avoid repeated freezing and thawing!

Usage suggestions

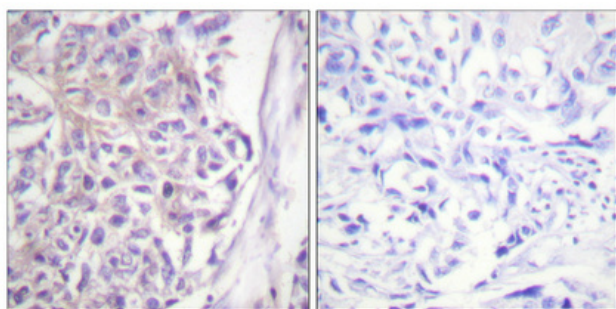
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



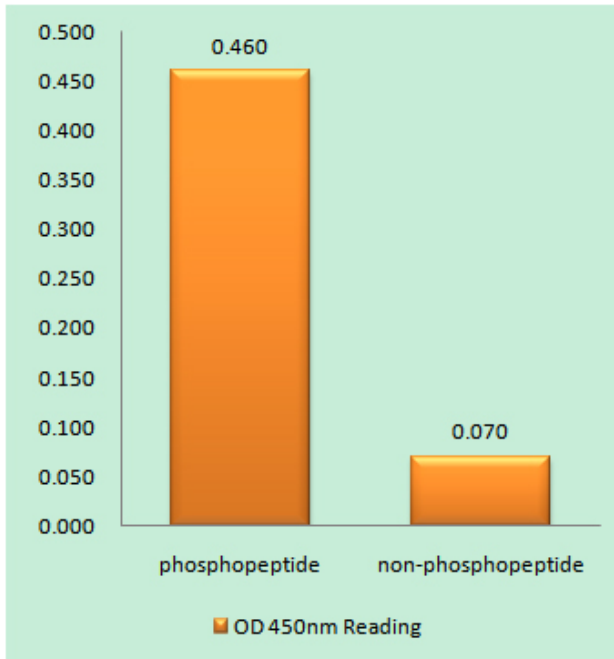
Products Images



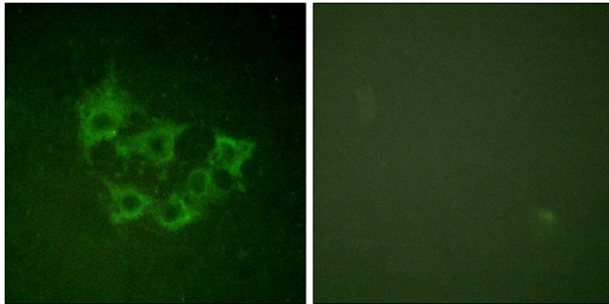
Western Blot analysis of various cells using
Phospho-Cot (T290) Polyclonal Antibody



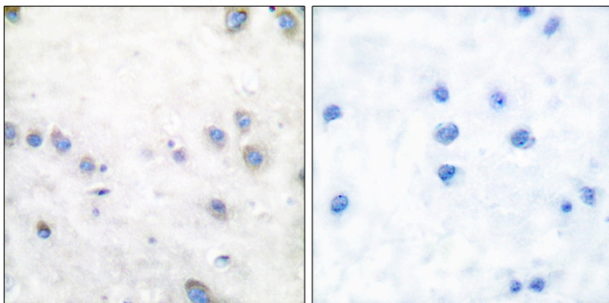
Immunohistochemical analysis of paraffin-embedded
Human breast cancer. Antibody was diluted at 1:100(4°
overnight). High-pressure and temperature
Tris-EDTA,pH8.0 was used for antigen retrieval.
Negative ctrl (right) obtained from antibody was
pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using COT (Phospho-Thr290) Antibody



Immunofluorescence analysis of HUVEC cells, using COT (Phospho-Thr290) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using COT (Phospho-Thr290) Antibody. The picture on the right is blocked with the phospho peptide.