



# Cot (phospho Thr290) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14511
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	MAP3K8
<b>Protein Name</b>	Mitogen-activated protein kinase kinase kinase 8
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human COT around the phosphorylation site of Thr290. AA range:256-305
<b>Specificity</b>	Phospho-Cot (T290) Polyclonal Antibody detects endogenous levels of Cot protein only when phosphorylated at T290.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	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.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MAP3K8; COT; ESTF; Mitogen-activated protein kinase kinase kinase 8; Cancer Osaka thyroid oncogene; Proto-oncogene c-Cot; Serine/threonine-protein kinase cot; Tumor progression locus 2; TPL-2
<b>Observed Band</b>	60kD
<b>Cell Pathway</b>	Cytoplasm .
<b>Tissue Specificity</b>	Expressed in several normal tissues and human tumor-derived cell lines.
<b>Function</b>	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 I kappaB 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],

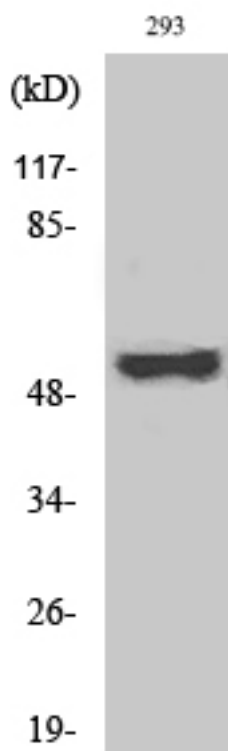
## matters needing attention

Avoid repeated freezing and thawing!

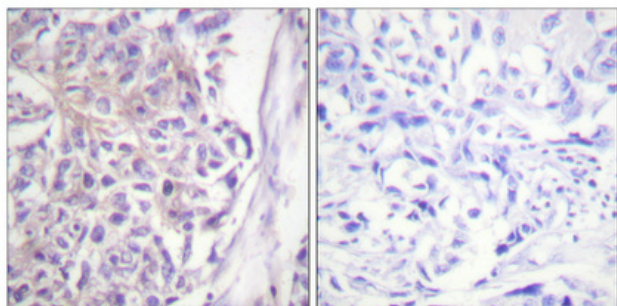
## Usage suggestions

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

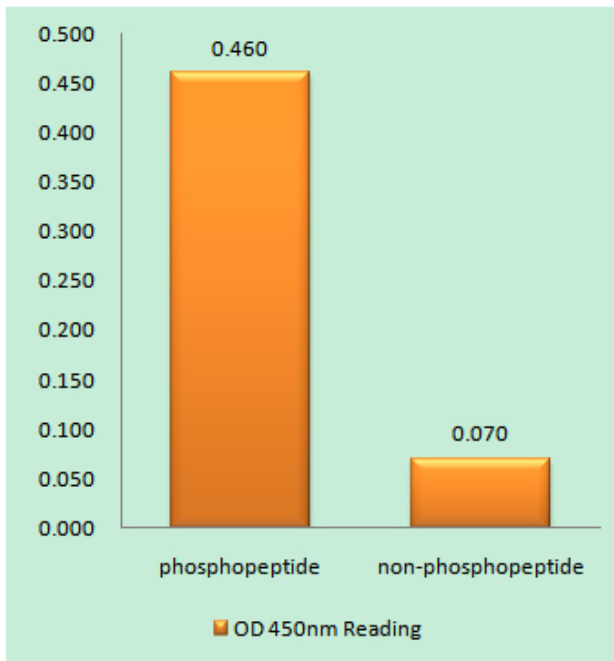
## Products Images



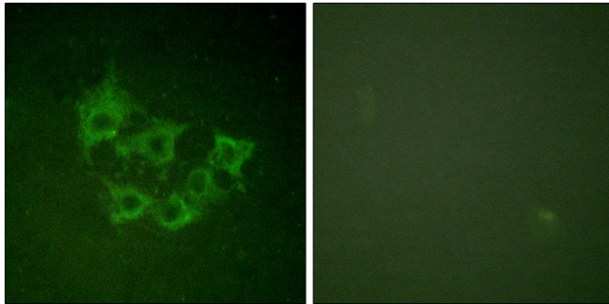
Western Blot analysis of various cells using Phospho-Cot (T290) Polyclonal Antibody



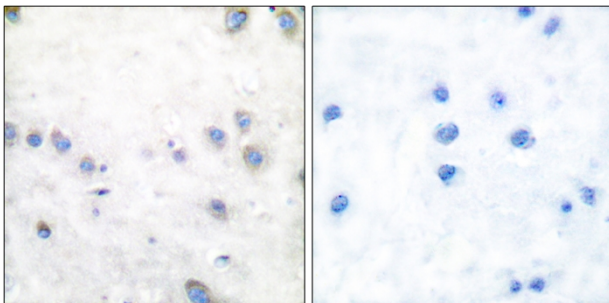
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



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.