

**Product Name: Cot (phospho Thr290) Rabbit Polyclonal Antibody**  
**Catalog #: APRab04491**

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## Summary

<b>Production Name</b>	Cot (phospho Thr290) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	MAP3K8 MAP3K8; COT; ESTF; Mitogen-activated protein kinase kinase kinase 8; Cancer Osaka
<b>Alternative Names</b>	thyroid oncogene; Proto-oncogene c-Cot; Serine/threonine-protein kinase cot; Tumor progression locus 2; TPL-2
<b>Gene ID</b>	1326.0
<b>SwissProt ID</b>	P41279.The antiserum was produced against synthesized peptide derived from human COT around the phosphorylation site of Thr290. AA range:256-305

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in
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other applications.

**Molecular Weight** 60kD

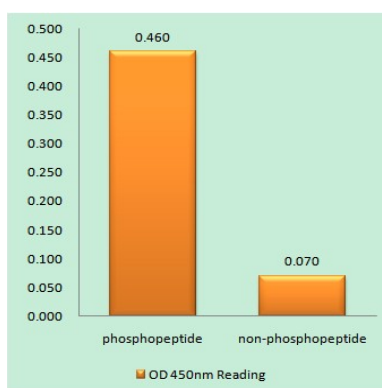
## Background

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 IκappaB 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],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 human tumor-derived cell lines.,

## Research Area

SAPK\_JNK; Regulation of Actin Dynamics; T\_Cell\_Receptor; Cell Growth; Stem cell pathway; Toll\_Like; MAPK\_ERK\_Growth;MAPK\_G\_Protein; B\_Cell\_Antigen

## Image Data

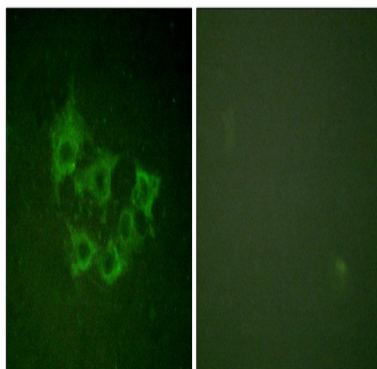


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-

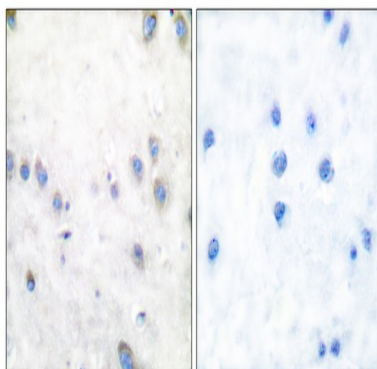
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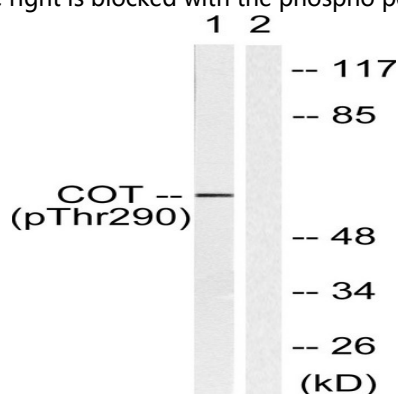
Phosphopeptide (Phospho-right) , using COT (Phospho-Thr290) Antibody



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

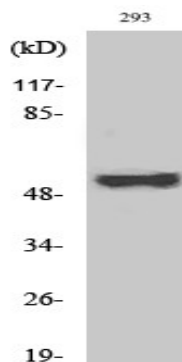


Immunohistochemistry analysis of paraffin-embedded human brain, using COT (Phospho-Thr290) Antibody. The picture on the right is blocked with the phospho peptide.

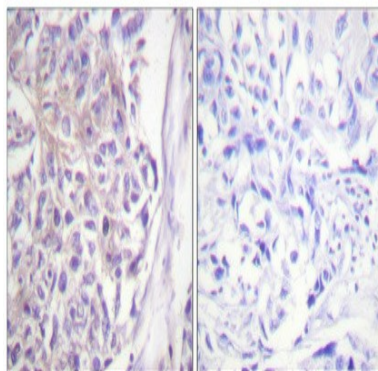


Western blot analysis of lysates from 293 cells treated with UV 15 ', using COT (Phospho-Thr290) Antibody. The lane on the right is blocked with the phospho peptide.

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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, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.

## Note

For research use only.