

**Cot (phospho Thr290) Polyclonal Antibody**

<b>Catalog No :</b>	YP0867
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Cot
<b>Fields :</b>	>>MAPK signaling pathway;>>Toll-like receptor signaling pathway;>>T cell receptor signaling pathway;>>TNF signaling pathway
<b>Gene Name :</b>	MAP3K8
<b>Protein Name :</b>	Mitogen-activated protein kinase kinase kinase 8
<b>Human Gene Id :</b>	1326
<b>Human Swiss Prot No :</b>	P41279
<b>Mouse Gene Id :</b>	26410
<b>Mouse Swiss Prot No :</b>	Q07174
<b>Rat Gene Id :</b>	116596
<b>Rat Swiss Prot No :</b>	Q63562
<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>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not

yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 60kD

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**Cell Pathway :** 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

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**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 kappa B 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],

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**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

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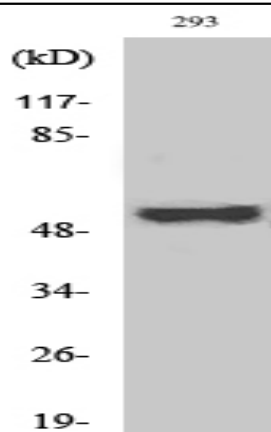
**Subcellular Location :** Cytoplasm .

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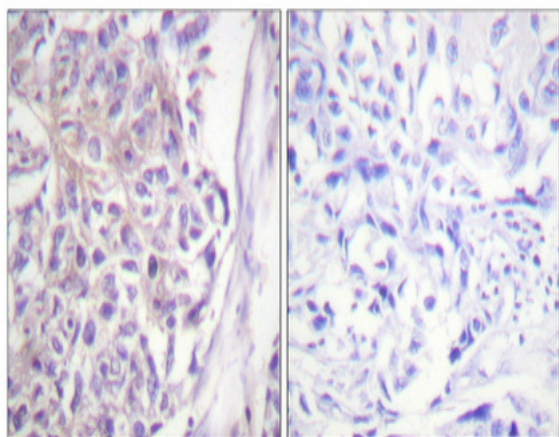
**Expression :** Expressed in several normal tissues and human tumor-derived cell lines.

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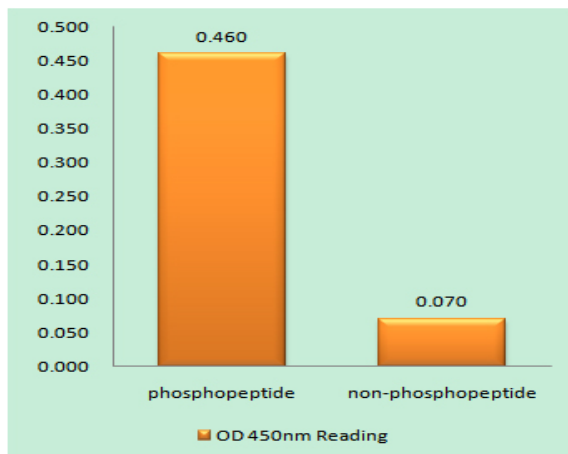
**Products Images**



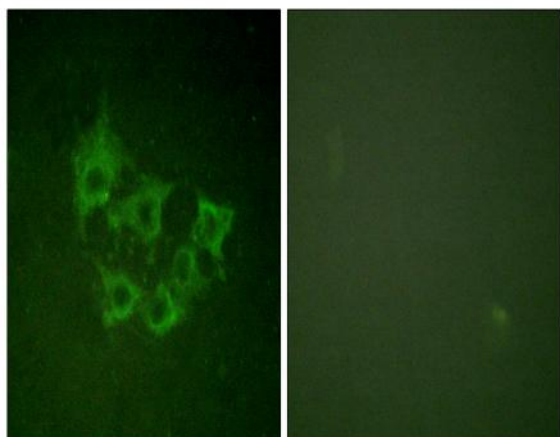
Western Blot analysis of various cells using Phospho-Cot (T290) Polyclonal Antibody



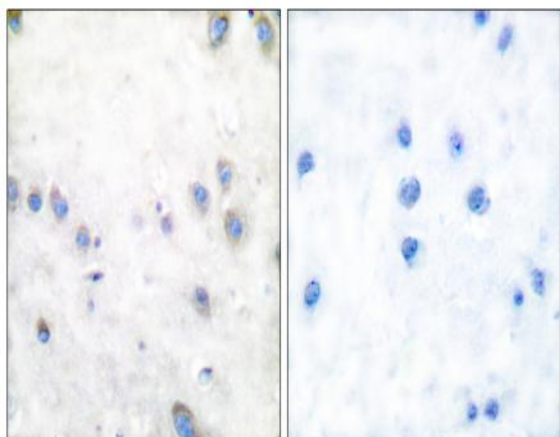
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



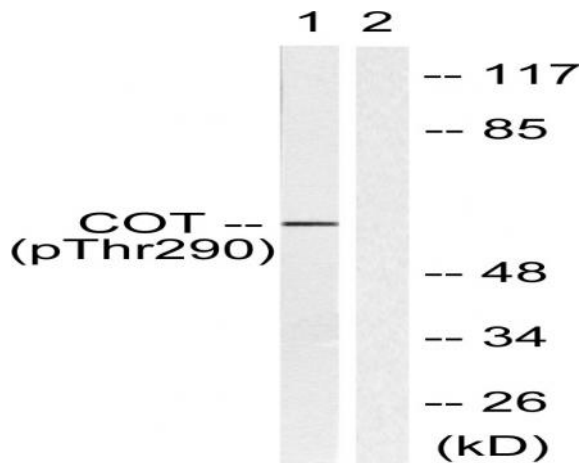
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using COT (Phospho-Thr290) Antibody



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



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



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 phosphopeptide.