

Cot (phospho Thr290) Polyclonal Antibody

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

yet tested in other applications.

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

Concentration : 1 mg/ml

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

Observed Band : 60kD

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

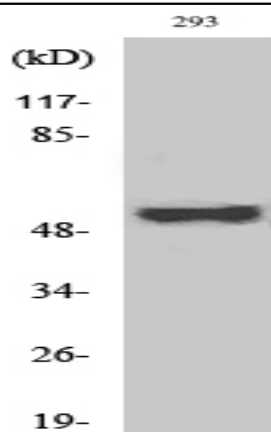
Background : This gene is an oncogene that encodes a member of the serine/threonine protein kinase family. The encoded protein localizes to the cytoplasm and can activate both the MAP kinase and JNK kinase pathways. This protein was shown to activate I kappa B kinases, and thus induce the nuclear production 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],

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

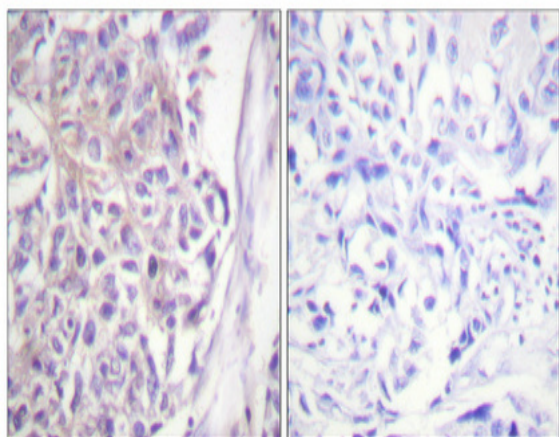
Subcellular Location : Cytoplasm .

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

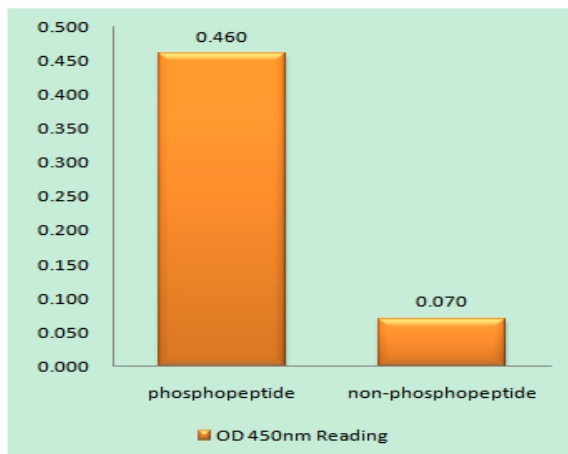
Products Images



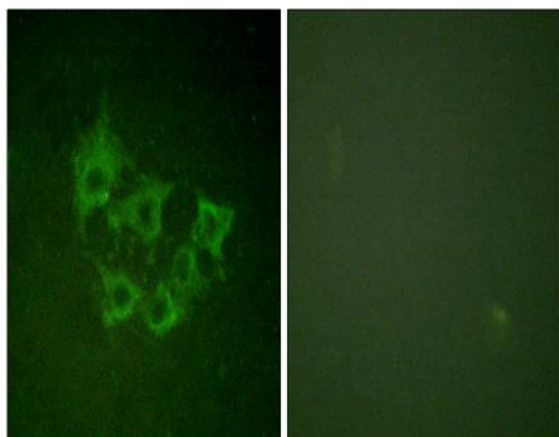
Western Blot analysis of various cells using Phospho-Cot (T290) Polyclonal Antibody



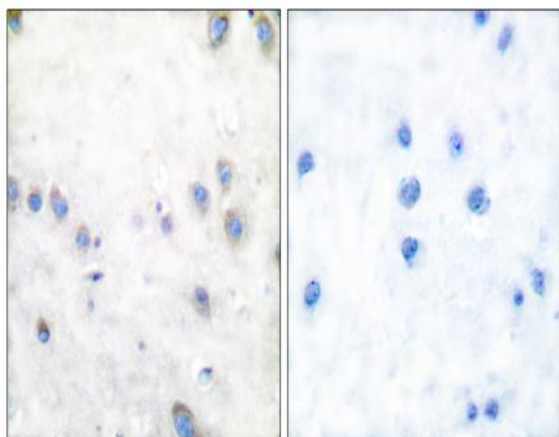
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



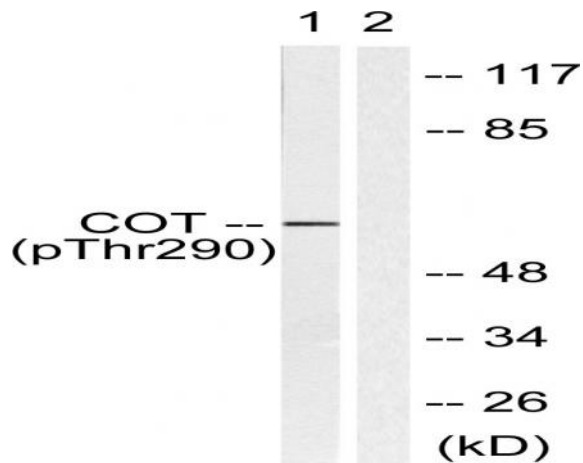
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using COT (Phospho-Thr290) Antibody



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