

**Phospho-MAP3K8(T290) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3413a**

**Specification**

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**Phospho-MAP3K8(T290) Antibody - Product Information**

Application	DB,E
Primary Accession	<a href="#">P41279</a>
Other Accession	<a href="#">NP_005195</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52925

**Phospho-MAP3K8(T290) Antibody - Additional Information**

**Gene ID** 1326

**Other Names**

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, MAP3K8, COT, ESTF

**Target/Specificity**

This MAP3K8 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding T290 of human MAP3K8.

**Dilution**

DB~~1:500

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-MAP3K8(T290) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-MAP3K8(T290) Antibody - Protein Information**

**Name** MAP3K8

**Synonyms** COT, ESTF

**Function** Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the pro-inflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression in T-cells. Involved in mediating host resistance to bacterial infection through negative regulation of type I interferon (IFN) production. In vitro, activates MAPK/ERK pathway in response to IL1 in an IRAK1-independent manner, leading to up-regulation of IL8 and CCL4. Transduces CD40 and TNFRSF1A signals that activate ERK in B-cells and macrophages, and thus may play a role in the regulation of immunoglobulin production. May also play a role in the transduction of TNF signals that activate JNK and NF-kappa-B in some cell types. In adipocytes, activates MAPK/ERK pathway in an IKBKB- dependent manner in response to IL1B and TNF, but not insulin, leading to induction of lipolysis. Plays a role in the cell cycle. Isoform 1 shows some transforming activity, although it is much weaker than that of the activated oncogenic variant.

#### **Cellular Location**

Cytoplasm

#### **Tissue Location**

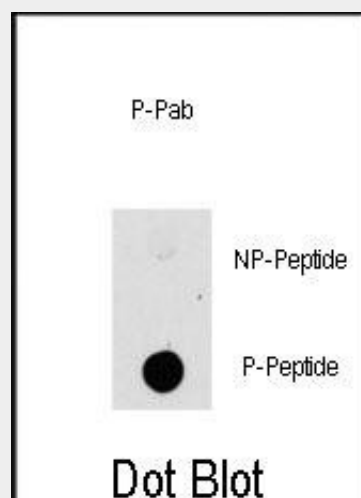
Expressed in several normal tissues and human tumor-derived cell lines

### **Phospho-MAP3K8(T290) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Phospho-MAP3K8(T290) Antibody - Images**



Dot blot analysis of anti-PAK1-pT423 Phospho-specific Pab (Cat.#AP3414a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

### **Phospho-MAP3K8(T290) Antibody - Background**

Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MEKK8 is able to activate NF-kappa-B 1 by stimulating proteasome-mediated proteolysis of NF-kappa-B 1/p105. The protein appears to play an important role in the cell cycle. This cytoplasmic protein is expressed in several normal tissues and human tumor-derived cell lines. The 58 kDa form is activated specifically during the S and G2/M phases of the cell cycle. The longer form undergoes phosphorylation on Ser residues mainly, and the shorter form on both Ser and Thr residues.

### **Phospho-MAP3K8(T290) Antibody - References**

- Sanchez-Gongora, E., et al., J. Biol. Chem. 275(40):31379-31386 (2000).  
Aoki, M., et al., J. Biol. Chem. 268(30):22723-22732 (1993).  
Chan, A.M., et al., Oncogene 8(5):1329-1333 (1993).  
Miyoshi, J., et al., Mol. Cell. Biol. 11(8):4088-4096 (1991).  
Aoki, M., et al., Oncogene 6(9):1515-1519 (1991).