

# COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP7957b

## **Specification**

## COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - Product Information

**Primary Accession** 

P41279

## COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - 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**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP7957b>AP7957b</a> was selected from the C-term region of human COT . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - 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

## COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - Protocols

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

## • Blocking Peptides

COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - Images

## COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - Background

COT, a member of the MAPKKK subfamily of Ser/Thr protein kinases, is able to activate NF-kappa-B 1 by stimulating proteasome-mediated proteolysis of NF-kappa-B 1/p105. It plays a role in the cell cycle. The longer form of cot has some transforming activity, although it is much weaker than the activated cot oncoprotein. 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.

## COT (MAP3K8/MEKK8) Antibody (C-term) Blocking peptide - 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).