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COT (MAP3K8/MEKK8) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7913a

Specification

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

Application	**WB, IHC-P,E**
Primary Accession	P41279
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**52925**
Antigen Region	**414-445**

COT (MAP3K8/MEKK8) Antibody (C-term) - Additional Information

Gene ID 1326

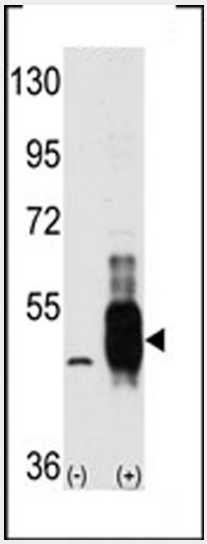
Other Names
Mitogen-activated protein kinase kinase kinase 8, Cancer Osaka thyroid oncogene, Proto-oncogene c-Cot, Serine/threonine-protein kinase cot, Tumor progression locus 2, TPL-2, MAP3K8, COT, ESTF

Target/Specificity
This COT (MAP3K8/MEKK8) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 414-445 amino acids from the C-terminal region of human COT (MAP3K8/MEKK8).

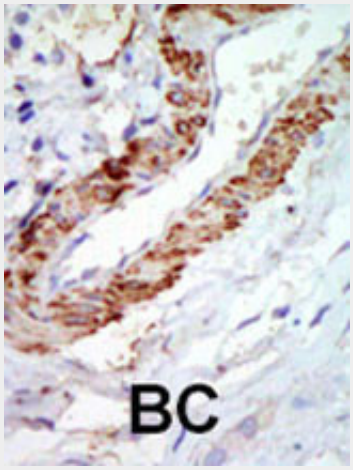
Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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



Western blot analysis of MEKK8 (arrow) using MEKK8 Antibody (C-term) (Cat.#AP7913a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MAP3K8 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has

cycles.

Precautions
COT (MAP3K8/MEKK8) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

COT (MAP3K8/MEKK8) Antibody (C-term) - Protein Information

Name MAP3K8

Synonyms COT, ESTF

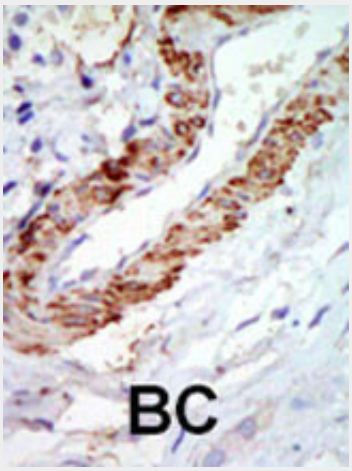
Function
Required for lipopolysaccharide (LPS)-induced, TLR4-mediated activation of the MAPK/ERK pathway in macrophages, thus being critical for production of the proinflammatory cytokine TNF-alpha (TNF) during immune responses. Involved in the regulation of T-helper cell differentiation and IFNG expression 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) - Protocols

not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



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COT (MAP3K8/MEKK8) Antibody (C-term) - 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.

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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).