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COT (MAP3K8/MEKK8) Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7957b

Specification

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

Application	**WB, IHC-P,E**
Primary Accession	P41279
Other Accession	Q63562, Q07174
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**52925**
Antigen Region	**368-397**

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 368-397 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 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 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) - Protocols

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

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

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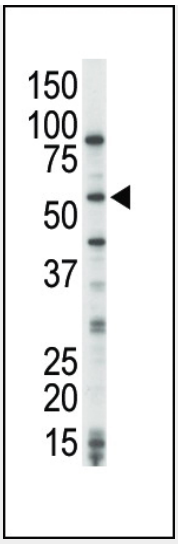
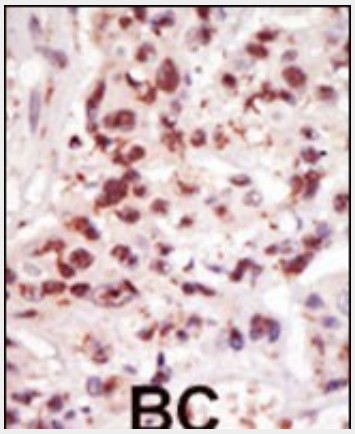
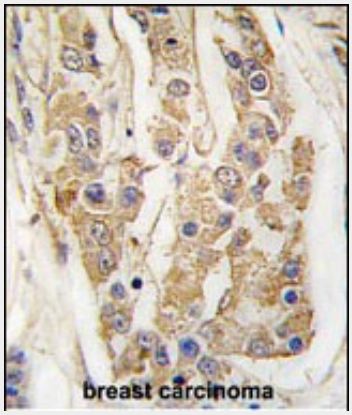


The anti-COT Pab (Cat. #AP7957b) is used in Western blot to detect COT in HeLa cell lysate.



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



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with COT Antibody (C-term) (Cat.#AP7957b), 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 not been evaluated.

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