10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7913a

Product Information

Application	WB, IHC-P, E
Primary Accession	P41279
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0947; RB0948
Antigen Region	414-445

Additional Information

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~~1:100~500 E~~Use at an assay dependent concentration.
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.

Protein Information

Background

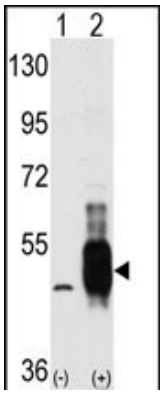
Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates 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.

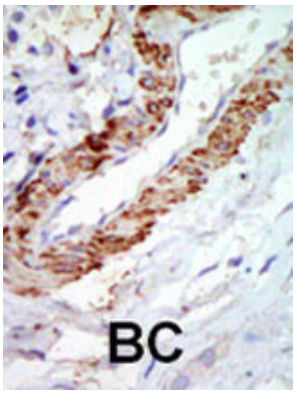
References

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).

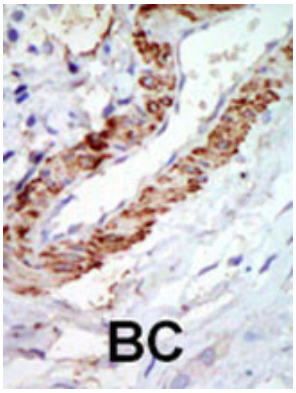
Images



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



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.