

## **Product datasheet for AP06071PU-N**

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OriGene Technologies, Inc.

## **MAP3K8 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunofluorescence: 1/50-1/200.

Immunohistochemistry on Paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 250-300 of Human Cot.

Specificity: This antibody detects endogenous levels of MAP3K8 / TPL-2 protein (region surrounding

Pro284).

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (>95% pure by SDS-PAGE)

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~53 kDa

**Gene Name:** mitogen-activated protein kinase kinase kinase 8

Database Link: Entrez Gene 26410 MouseEntrez Gene 116596 RatEntrez Gene 1326 Human

P41279





Background:

The role of mitogen-activated protein kinases (MAPKs) in cell signaling pathways is well established. The rat gene Tpl-2, for tumor progression locus 2, and the human and mouse homologues c-Cot, for cancer osaka thyroid oncogene, encode a proto-oncogene serine/threonine protein kinase that was shown to play a role in the functional activation of the MAP kinase pathway. Overexpression of Cot induces MAP kinase activation in COS-1 and NIH/3T3 cells. Cot-mediated activation of MAP kinase is inhibited by both Ras N17, a dominant negative mutant of c-H-Ras, and Raf-1s621A, a dominant negative mutant of Raf-1, suggesting that Cot functions upstream of Ras and Raf-1. Other studies have shown that a kinase-negative, dominant negative mutant of Cot partially blocks Ras or Raf-1-induced MAP kinase activation, arguing that Cot functions downstream of Ras and Raf-1. To explain these contrasting findings, it has been suggested that Cot, Ras and Raf-1 may form a multimeric complex that phosphorylates MEK-1. Cot has also been shown to be implicated in T lymphocyte activation.

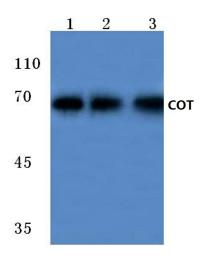
**Synonyms:** MAPK, Tumor progression locus 2, COT, ESTF

**Protein Families:** Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway, T cell receptor signaling pathway, Toll-like receptor signaling

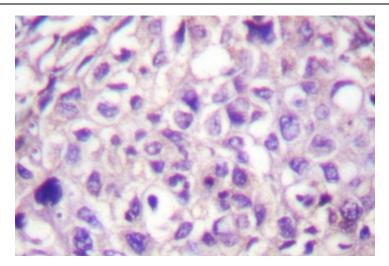
pathway

## **Product images:**



Western blot (WB) analysis of COT antibody at 1/500 dilution Lane 1:HEK293T cell lysate Lane 2:Mouse brain tissue lysate Lane 3:Rat liver tissue lysate





Immunohistochemical (IHC) analysis in paraffinembedded human brain tissue using MAP3K8 / TPL-2 antibody.