

**MAP2K2 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1362a****Specification**

---

**MAP2K2 Antibody - Product Information**

Application	<b>WB, IF, FC, IHC</b>
Primary Accession	<a href="#">P36507</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>44kDa KDa</b>

**Description**

MAP2K2, also called MEK2, it is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinases. Mutations in this gene cause cardiofaciocutaneous syndrome (CFC syndrome), a disease characterized by heart defects, mental retardation, and distinctive facial features similar to those found in Noonan syndrome. The inhibition or degradation of this kinase is also found to be involved in the pathogenesis of Yersinia and anthrax.

**Immunogen**

Purified recombinant fragment of human MAP2K2 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**MAP2K2 Antibody - Additional Information**

**Gene ID** 5605

**Other Names**

Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, 2.7.12.2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

**Dilution**

WB~~1/500 - 1/2000

IF~~1/200 - 1/1000

FC~~1/200 - 1/400

IHC~~1:200~~1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MAP2K2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## MAP2K2 Antibody - Protein Information

**Name** MAP2K2

**Synonyms** MEK2, MKK2, PRKMK2

### Function

Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:<a href="http://www.uniprot.org/citations/29433126" target="\_blank">29433126</a>).

### Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably regulated by its interaction with KSR1.

## MAP2K2 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## MAP2K2 Antibody - Images

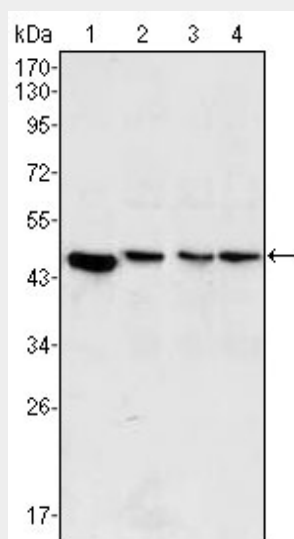


Figure 1: Western blot analysis using MAP2K2 mouse mAb against PC-12 (1), Jurkat (2), HeLa (3) and NIH/3T3 (4) cell lysate.

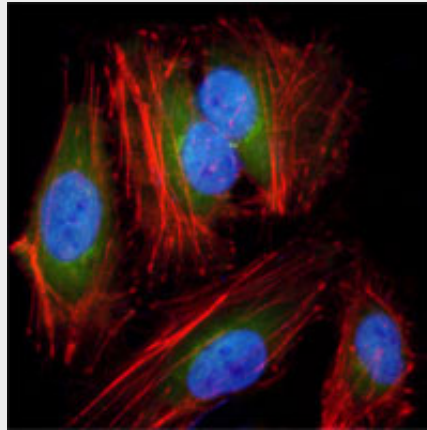


Figure 2: Immunofluorescence analysis of HeLa cells using anti-MAP2K2 mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

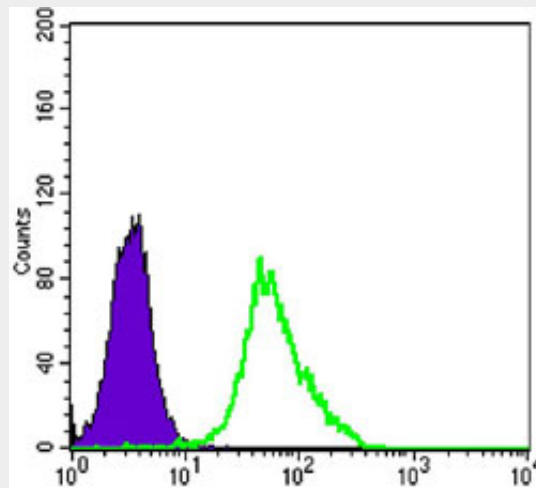


Figure 3: Flow cytometric analysis of HeLa cells using anti-MAP2K2 mAb (green) and negative control (purple).

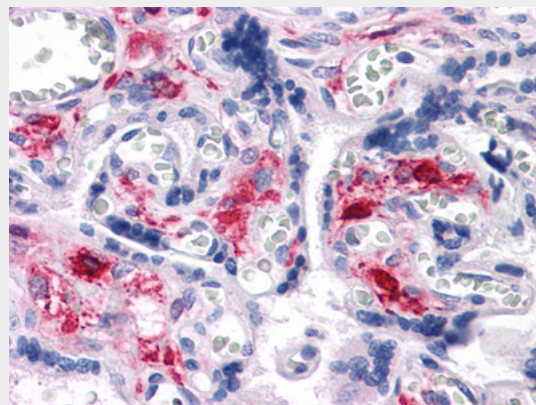


Figure 3: Immunohistochemical analysis of paraffin-embedded human Liver tissues using NKX3A mAb

### MAP2K2 Antibody - References

1. Mol Cell Biol. 1993 Aug;13(8):4679-90.
2. Eur J Biochem. 1995 Nov 15;234(1):32-8.
3. Oncogene. 1998 Jul 9;17(1):57-65.