

**Mouse Anti-MAP3K1 (Mitogen-Activated Protein Kinase Kinase Kinase 1) [2F6]: MC0079**

**Intended Use:** For Research Use Only

**Description:** Mitogen-activated protein (MAP) kinase cascades are activated by various extracellular stimuli, including growth factors. The MEK kinases (also designated MAP kinase kinase kinases, MKKKs, MAP3Ks or MEKKs) phosphorylate and thereby activate the MEKs (also called MAP kinase kinases or MKKs), including ERK, JNK and p38. These activated MEKs in turn phosphorylate and activate the MAP kinases. The MEK kinases include Raf-1, Raf-B, Mos, MEK kinase-1, MEK kinase-2, MEK kinase-3, MEK kinase-4 and ASK 1 (MEK kinase- 5). MEK kinase-1 activates the ERK and c-Jun NH2-terminal kinase (JNK) pathways by phosphorylation of MAP2K1 and MAP2K4, and also activates the central protein kinases of the NF $\kappa$ B pathway, CHUK and IKK $\beta$ . Additionally, MEK kinase-1 uses an E3 ligase through its PHD domain, a RING-finger-like structure, to target proteins for degradation through ubiquitination.

**Specifications**

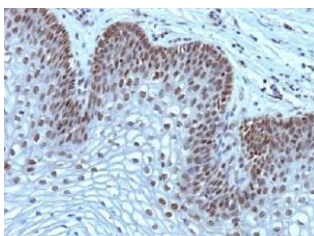
Clone: 2F6  
 Source: Mouse  
 Isotype: IgG2a/k  
 Reactivity: Human  
 Localization: Cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq$  0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, Flow Cyt, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
MAP3K1 (Mitogen-Activated Protein Kinase Kinase Kinase 1) Concentrated	MC0079	1 ml

**IHC Procedure\***

Positive Control Tissue: HeLa or HL-60 cells or liver tissue  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human cervical carcinoma stained with anti-MAP3K1 using DAB

**References**

1. Hematopoietic progenitor kinase 1, mitogen-activated protein/extracellular signal-related protein kinase kinase kinase 1, and phosphomitogen-activated protein kinase kinase 4 are overexpressed in extramammary Paget disease. Qian Y, et al. Am J Dermatopathol. Oct;33(7):681-6, 2011.
2. Depleting MEK1 expression inhibits the ability of invasion and migration of human pancreatic cancer cells. Su F, et al. J Cancer Res Clin Oncol. Dec;135(12):1655-63, 2009.
3. The mitogen activated protein kinase signal transduction pathway: from the cell surface to the nucleus. Guan, K.L. Cell. Signal. 6: 581-589, 1994.