

Basic Information

Product Name	Anti-MEK1/MAP2K1 (Phospho-S298) Antibody (Clone#HBO-13)	
Gene Name	MAP2K1	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human MEK1	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	45 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200

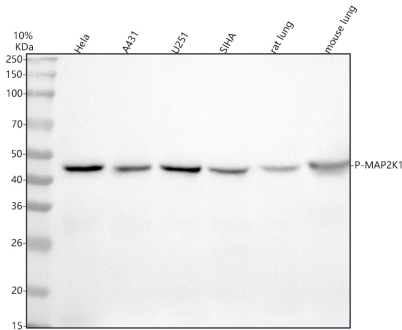
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Dual specificity mitogen-activated protein kinase kinase 1 is an enzyme that in humans is encoded by the MAP2K1 gene. The protein encoded by this gene is a member of the dual specificity protein kinase family, which acts as a mitogen-activated protein(MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases(ERKs), act as an integration point for multiple biochemical signals. This protein kinase lies upstream of MAP kinases and stimulates the enzymatic activity of MAP kinases upon activation by a wide variety of extra- and intracellular signals. As an essential component of the MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. Rampoldi et al.(1997) localized the MAP2K1 gene to 15q22.1-q22.33.

Selected Validation Data



Western blot analysis of anti-MEK1/MAP2K1 (Phospho-S298) antibody (BM4690). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human A431 whole cell lysates,

Lane 3: human U251 whole cell lysates,

Lane 4: human SiHa whole cell lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MEK1/MAP2K1 (Phospho-S298) antigen affinity purified monoclonal antibody (BM4690) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for MEK1/MAP2K1 (Phospho-S298) at approximately 45 kDa. The expected band size for MEK1/MAP2K1 (Phospho-S298) is at 43 kDa.