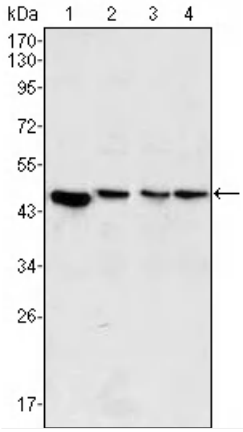
MEK-2 Monoclonal Antibody

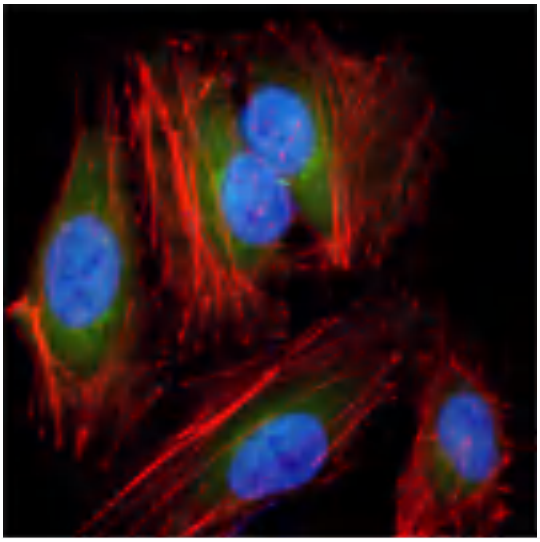
Catalog No	YP-Ab-14172
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;FCM;ELISA
Gene Name	MAP2K2
Protein Name	Dual specificity mitogen-activated protein kinase kinase 2
Immunogen	Purified recombinant fragment of human MEK-2 expressed in E. Coli.
Specificity	MEK-2 Monoclonal Antibody detects endogenous levels of MEK-2 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MAP2K2; MEK2; MKK2; PRKMK2; Dual specificity mitogen-activated protein kinase kinase 2; MAP kinase kinase 2; MAPKK 2; ERK activator kinase 2; MAPK/ERK kinase 2; MEK 2
Observed Band	
Cell Pathway	Cytoplasm . Membrane ; Peripheral membrane protein . Membrane localization is probably regulated by its interaction with KSR1. .
Tissue Specificity	Colon carcinoma,Epithelium,Human cerebellum,Muscle,Platelet
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in MAP2K2 are a cause of cardiofaciocutaneous syndrome (CFC syndrome) [MIM:115150]; also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.,function:C

Background	The protein encoded by this gene 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 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. A pseudogene, which is located on chromosome 7, has been identified for this gene. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

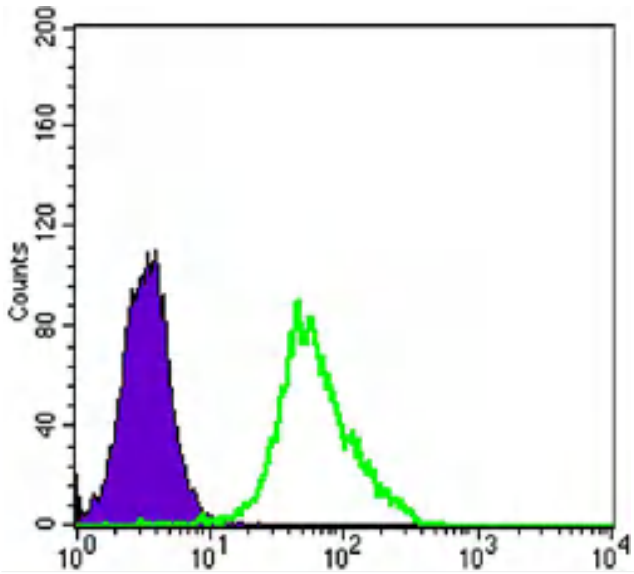
Products Images



Western Blot analysis using MEK-2 Monoclonal Antibody against PC-12 (1), Jurkat (2), HeLa (3) and NIH/3T3 (4) cell lysate.



Immunofluorescence analysis of Hela cells using MEK-2 Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Hela cells using MEK-2 Monoclonal Antibody (green) and negative control (purple).