Immunoway
Best Tools for immunology Research

MEK-2 Monoclonal Antibody

Catalog No :	YM0435
Reactivity :	Human;Mouse;Rat
Applications :	WB;IF;FCM;ELISA
Target :	MEK2
Fields :	>>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Cellular senescence;>>Vascular smooth muscle contraction;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Gap junction;>>Signaling pathways regulating pluripotency of stem cells;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>Natural killer cell mediated cytotoxicity;>>T cell receptor signaling pathway;>>B cell receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Long-term depression;>>Regulation of actin cytoskeleton;>>Insulin signaling pathway;>>GnRH signal
Gene Name :	MAP2K2
Protein Name :	Dual specificity mitogen-activated protein kinase kinase 2
Human Gene Id :	5605
Human Swiss Prot No :	P36507
Mouse Gene Id :	26396
Mouse Swiss Prot No :	Q63932
Rat Gene Id :	58960
Rat Swiss Prot No :	P36506

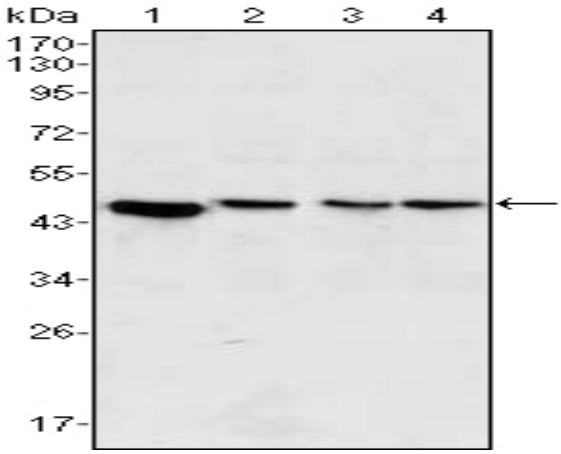
Immunogen :	Purified recombinant fragment of human MEK-2 expressed in E. Coli.
Specificity :	MEK-2 Monoclonal Antibody detects endogenous levels of MEK-2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	44kD
Cell Pathway :	Regulates Angiogenesis; Regulation of Actin Dynamics; Stem cell pathway; T_Cell_Receptor; Insulin Receptor; Cell Growth; Toll_Like; MAPK_ERK_Growth;MAPK_G_Protein; B_Cell_Antigen; PI3K/Akt
P 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.
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],
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

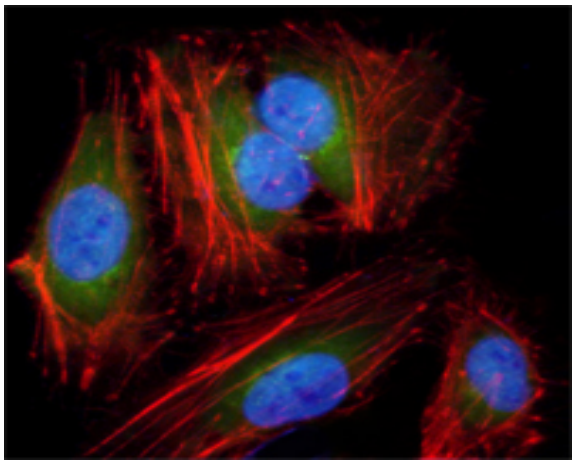
Subcellular Location : Cytoplasm . Membrane ; Peripheral membrane protein . Membrane localization is probably regulated by its interaction with KSR1. .

Expression : Colon carcinoma,Epithelium,Human cerebellum,Muscle,Platelet

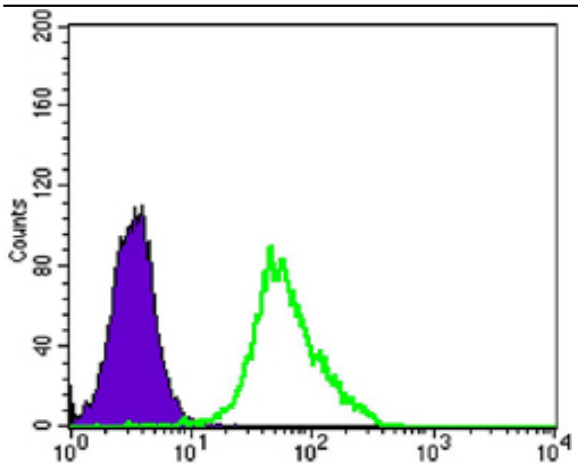
Products Images



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).