



MEK-1/2 (phospho Ser222/226) Polyclonal Antibody

Catalog No	YP-Ab-14323
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MAP2K1/MAP2K2
Immunogen	The antiserum was produced against synthesized peptide derived from human MEK1/2 around the phosphorylation site of Ser221. AA range:193-242
Specificity	Phospho-MEK-1/2 (S222/226) Polyclonal Antibody detects endogenous levels of MEK-1/2 protein only when phosphorylated at S222/226.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ERK activator kinase 1;MAP kinase kinase 1;MAP2K1;MAPK/ERK kinase 1; MAPKK 1;MAPKK1;MEK 1;MEK-1/2;MAP2K1/MAP2K2;Dual specificity mitogen-activated protein kinase kinase 1/2;MEK1;PRKMK1;Dual specificity mitogen-activated protein kinase kinase 1;MKK1;MAP2K2;MEK2;MKK2;PRKMK2;Dual specificity mitogen-activated protein k
Observed Band	44kD
Calculated Molecular Weight	44kD
Cell Pathway	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body . Cytoplasm . Nucleus . Membrane ; Peripheral membrane protein . Localizes at centrosomes during prometaphase, midzone during anaphase and midbody during telophase/cytokinesis (PubMed:14737111). Membrane localization is probably regulated by its interaction with KSR1 (PubMed:10409742). .
Tissue Specificity	Widely expressed, with extremely low levels in brain.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Defects in MAP2K1 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.,enzyme reg

Background

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 wide variety of extra- and intracellular signals. As an essential component of MAP kinase signal transduction pathway, this kinase is involved in many cellular processes such as proliferation, differentiation, transcription regulation and development. [provided by RefSeq, Jul 2008],

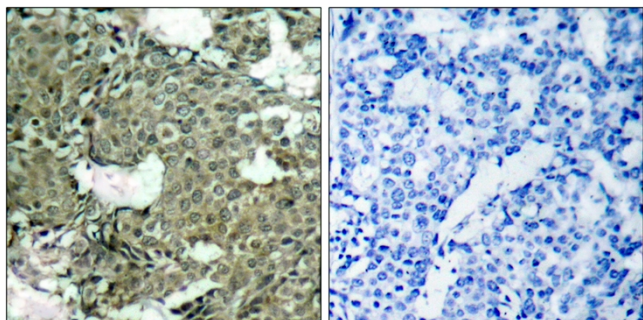
matters needing attention

Avoid repeated freezing and thawing!

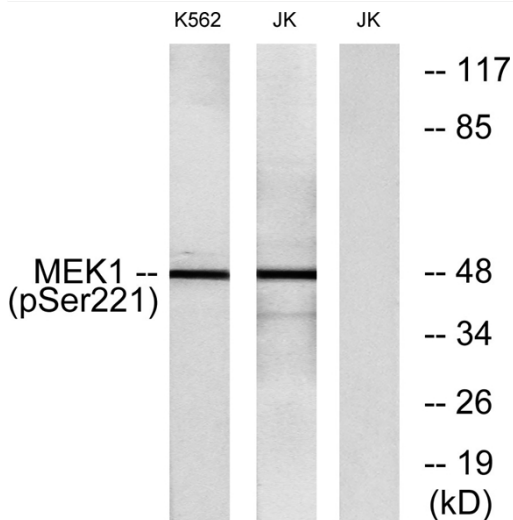
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MEK1/2 (Phospho-Ser221) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells treated with serum 20% 15' and Jurkat cells treated with EGF, using MEK1/2 (Phospho-Ser221) Antibody. The lane on the right is blocked with the phospho peptide.