



MEK-1 (phospho Thr292) Polyclonal Antibody

Catalog No	YP-Ab-14321
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MAP2K1
Immunogen	The antiserum was produced against synthesized peptide derived from human MEK1 around the phosphorylation site of Thr291. AA range:261-310
Specificity	Phospho-MEK-1 (T292) Polyclonal Antibody detects endogenous levels of MEK-1 protein only when phosphorylated at T292.
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	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
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;Dual specificity mitogen-activated protein kinase kinase 1;MEK1;PRKMK1;MKK1
Observed Band	43kD
Calculated Molecular Weight	43kD
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

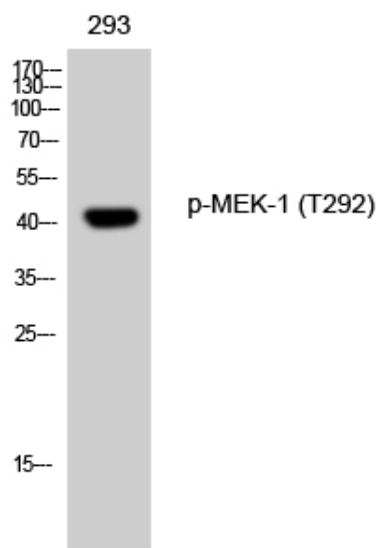
Avoid repeated freezing and thawing!

Usage suggestions

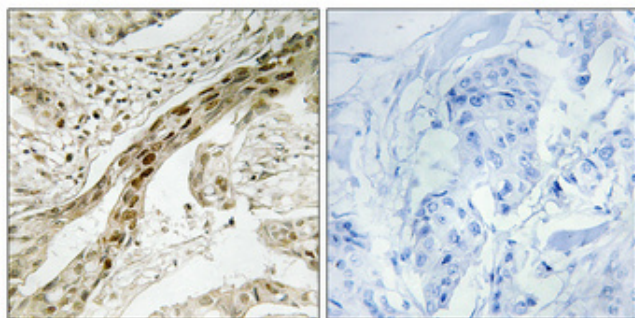
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



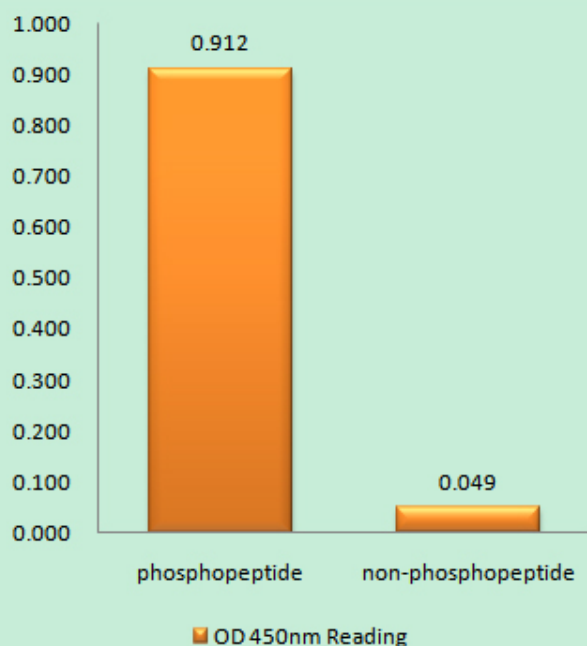
Products Images



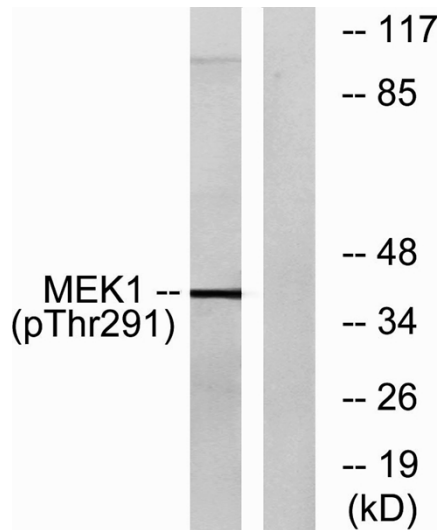
Western Blot analysis of 293 cells using Phospho-MEK-1 (T292) Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MEK1 (Phospho-Thr291) Antibody



Western blot analysis of lysates from K562 cells, using MEK1 (Phospho-Thr291) Antibody. The lane on the right is blocked with the phospho peptide.