



# MEK-1 (phospho Thr286) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14461                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Name</b>                   | MAP2K1                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human MEK1 around the phosphorylation site of Thr286. AA range:252-301                                                                                                                                                                                                                                                                                                            |
| <b>Specificity</b>                 | Phospho-MEK-1 (T286) Polyclonal Antibody detects endogenous levels of MEK-1 protein only when phosphorylated at T286.                                                                                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                 |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                    | 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                                                                                                                                                                                                                                                                           |
| <b>Observed Band</b>               | 43kD                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Calculated Molecular Weight</b> | 43kD                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cell Pathway</b>                | Cytoplasm, cytoskeleton, microtubule organizing center, centrosome .<br>Cytoplasm, cytoskeleton, microtubule organizing center, spindle pole body .<br>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). . |
| <b>Tissue Specificity</b>          | Widely expressed, with extremely low levels in brain.                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Function</b>                    | 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],

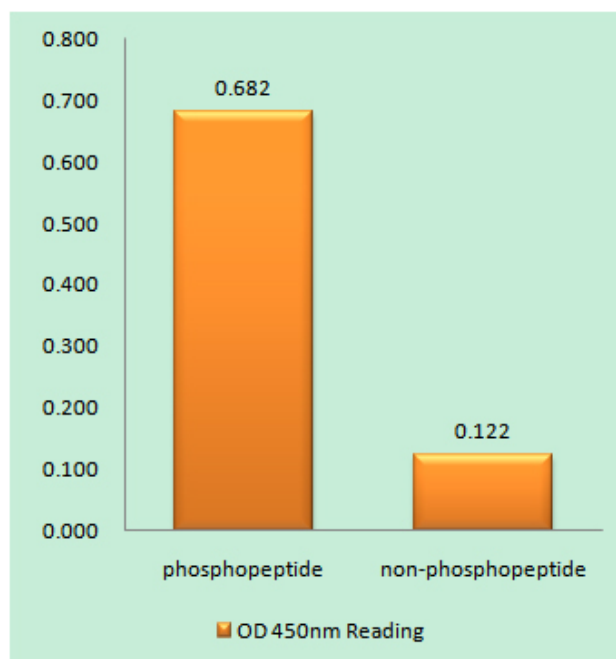
## matters needing attention

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



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using MEK1 (Phospho-Thr286) Antibody

Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using MEK1 (Phospho-Thr286) Antibody. The picture on the right is blocked with the phospho peptide.

Western blot analysis of lysates from K562 cells, using MEK1 (Phospho-Thr286) Antibody. The lane on the right is blocked with the phospho peptide.

MEK1 --  
(pThr286)

-- 85

-- 48

-- 34

-- 26

-- 19

(kD)