abcam

Product datasheet

Anti-MEK1 antibody ab109556

1 Abreviews 5 Images

Overview

Product name	Anti-MEK1 antibody
Description	Rabbit polyclonal to MEK1
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Rat, Human **Predicted to work with:** Mouse, Rabbit, Chicken, Cow, Dog, Pig
Immunogen	Synthetic peptide corresponding to Human MEK1 aa 350-450 (C terminal). Database link: **Q02750** Run BLAST with Run BLAST with
Positive control	WB: Rat thymus tissue lysate, Rat skeletal muscle tissue lysate, Rat kidney tissue lysate, Rat lung tissue lysate, CEM whole cell lysate, Colo320 whole cell lysate. IHC-P: Human Lung Cancer Tissue and Human Mammary Cancer Tissue ICC: MCF-7
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservatives: 0.025% Thimerosal (merthiolate), 0.025% Sodium azide Constituents: 2.5% BSA, 0.45% Sodium chloride, 0.1% Dibasic monohydrogen sodium phosphate
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab109556 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★☆☆ (1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 43 kDa.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 µg/ml.

Target

Function Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates ERK1 and ERK2 MAP kinases.

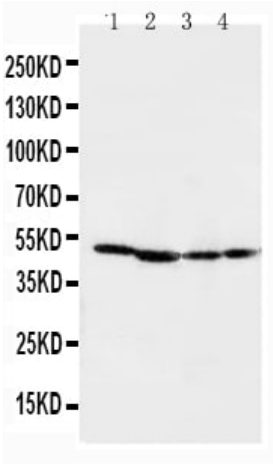
Tissue specificity Widely expressed, with extremely low levels in brain.

Involvement in 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.

Sequence similarities Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.
Contains 1 protein kinase domain.

Post-translational modifications Phosphorylation on Ser/Thr by MAP kinase kinase kinases (RAF or MEKK1) regulates positively the kinase activity.
Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK signaling pathway.

Images

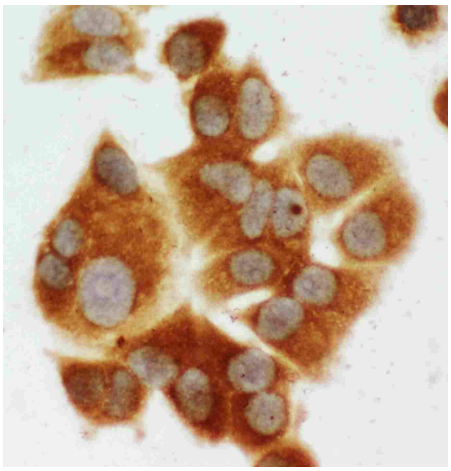


Western blot - Anti-MEK1 antibody (ab109556)

All lanes : Anti-MEK1 antibody (ab109556) at 0.5 µg/ml

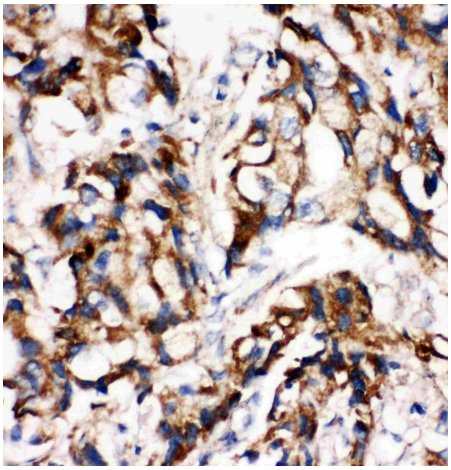
Lane 1 : Rat Skeletal Muscle Tissue Lysate
Lane 2 : Rat Kidney Tissue Lysate
Lane 3 : CEM Cell Lysate
Lane 4 : COLO20 Cell Lysate

Predicted band size: 43 kDa



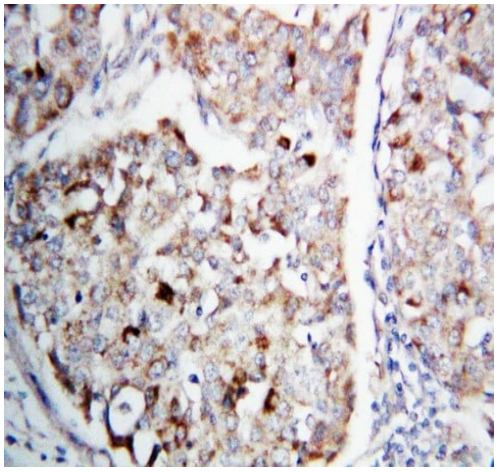
Immunocytochemistry/ Immunofluorescence - Anti-MEK1 antibody (ab109556)

Immunocytochemistry/ Immunofluorescence of MCF-7 cells staining MEK1 using ab109556 at 1 µg/ml.



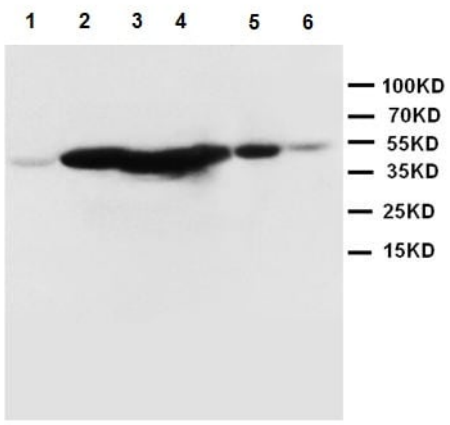
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEK1 antibody (ab109556)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) of Human Mammary Cancer Tissue staining MEK1 using ab109556 at 1 µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEK1 antibody (ab109556)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) of Human Lung Cancer Tissue staining MEK1 using ab109556 at 1 µg/ml.



Western blot - Anti-MEK1 antibody (ab109556)

All lanes : Anti-MEK1 antibody (ab109556) at 1 µg/ml

Lane 1 : Rat thymus tissue lysate
Lane 2 : Rat skeletal muscle tissue lysate
Lane 3 : Rat kidney tissue lysate
Lane 4 : Rat lung tissue lysate
Lane 5 : CEM whole cell lysate
Lane 6 : Colo320 whole cell lysate

Predicted band size: 43 kDa

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