abcam

Product datasheet

PE Anti-MEK1 antibody [Y77] ab213334



RabMAb

2 Images

Overview

Product name PE Anti-MEK1 antibody [Y77]

Description PE Rabbit monoclonal [Y77] to MEK1

Host species Rabbit

Conjugation PE. Ex: 488nm, Em: 575nm

Specificity This antibody does not crossreact with other MAP kinase kinase family members.

Tested applications Suitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human MEK1 aa 350 to the C-terminus. The exact immunogen sequence

used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

Support team to discuss your requirements.

Database link: Q02750

Positive control Flow Cyt (intra): HeLa cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at 4°C (stable for up to 12 months). Upon delivery aliquot. Store at +4°C.

Do Not Freeze. Store In the Dark.

Storage buffer pH: 7.4

Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA

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Purity Protein A purified

Clonality Monoclonal

Clone number Y77

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab213334 in the following tested applications.

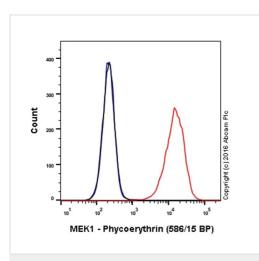
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.

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 kinases (RAF or MEKK1) regulates positively the kinase activity. Acetylation by Yersinia yopJ prevents phosphorylation and activation, thus blocking the MAPK	

signaling pathway.

Images



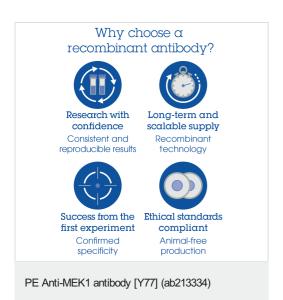
Flow Cytometry (Intracellular) - PE Anti-MEK1 antibody [Y77] (ab213334)

Overlay histogram showing HeLa cells stained with ab213334 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab213334, 1/500 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin (<u>ab209478</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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