abcam

ab289976

Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR24759-32
Purification technique	Affinity purification Protein A
Concentration	0.572 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Dot

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information MAP2K3 phospho S189

Function	Dual specificity kinase. Is activated by cytokines and environmental stress in vivo. Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in the MAP kinase p38. Part of a signaling cascade that begins with the activation of the adrenergic receptor ADRA1B and leads to the activation of MAPK14.

Storage

Shipped at conditions	Conditional Ambient

Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	MEK3 also known as MAP2K3 is a kinase that plays a significant mechanical role within cells. It is part of the MAP kinase family sharing functions with enzymes like MEK6. MEK3 has a molecular mass of approximately 38 kDa and is localized in cytoplasmic regions of various cell types. This protein is expressed in a wide range of tissues indicating its diverse functional roles across different biological systems.
Biological function summary	MEK3 is involved in the phosphorylation cascade within the mitogen-activated protein kinase (MAPK) pathway. It often exists as part of a complex working alongside other kinases to activate p38 MAPK which then regulates gene expression. The involvement of MEK3 in this signaling cascade influences processes such as cellular stress response and inflammation. Its ability to modulate these processes makes MEK3 an important component in maintaining cellular homeostasis.
Pathways	MEK3 functions as an essential link within the stress-activated pathways like the MAPK signaling pathway. It phosphorylates and activates the p38 MAPK pathway

	therefore regulating activities related to cellular stress and inflammatory responses. MEK3 works in conjunction with related kinases such as MEK6 to propagate the MAPK signaling cascade further emphasizing its important role in these pathways.
Associated diseases and disorders	MEK3 has a documented involvement in inflammatory conditions and cancer. Its role in activating the p38 MAPK pathway connects it to inflammatory diseases where dysregulated signaling may lead to excessive inflammation. Furthermore aberrant MEK3 activity is associated with certain cancers as it affects cell proliferation and survival. MEK3's interactions with other kinases like MEK6 underline its involvement in these pathological processes making it a potential target for therapeutic intervention.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

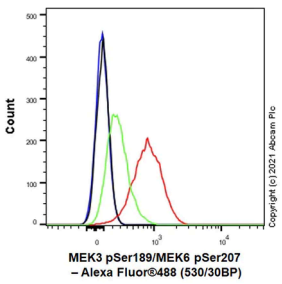
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

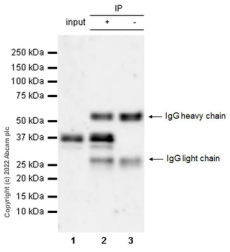
Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



Flow Cytometry (Intracellular) - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (human cervix adenocarcinoma epithelial cell) starved overnight then treated with 250 ng/ml anisomycin for 30 min (Red) /Untreated control (Green) cells labelling MEK3 (phospho S189) + MEK6 (phospho S207) with ab289976 at 1/50 dilution (1ug) (Red) and Green (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976)

MEK3 (phospho S189) + MEK6 (phospho S207) was immunoprecipitated from 0.35 mg HeLa starved overnight, then treated with 250ng/ml anisomycin for 30 minutes with ab289976 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab289976 at 1/1000 dilution. Blocking and dilution buffer and concentration: 5% NFDM/TBST.
All lanes:
Immunoprecipitation - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976) at 1/30 dilution

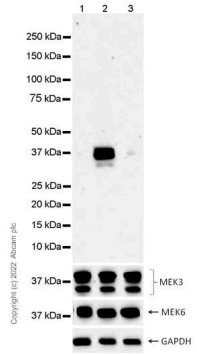
Lanes 1 - 2:
HeLa starved overnight, then treated with 250ng/ml anisomycin for 30 minutes whole cell lysate

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab289976 in HeLa starved overnight, then treated with 250ng/ml anisomycin for 30 minutes whole cell lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Exposure time: 49s



Western blot - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976)

Blocking and diluting buffer and concentration: 5% NFDM/TBST Loading controls used in this western blot are anti-MEK3 antibody [EPR17345] (ab195037), anti-MEK6 antibody [EP557Y] (ab33866) and GAPDH RabMAb(ab181602) . Alkaline phosphatase was used to treated membrane.
All lanes:
Western blot - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976) at 1/1000 dilution

Lane 1:
HeLa (human cervix adenocarcinoma epithelial cell) starved overnight, whole cell lysate

Lane 2:
HeLa starved overnight, then treated with /ml anisomycin for 30 minutes, whole cell lysate 20 (untreated membrane)

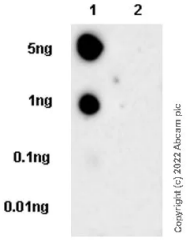
Lane 3:
HeLa starved overnight, then treated with /ml anisomycin for 30 minutes, whole cell lysate 20 (phosphatase treated membrane)

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 36 kDa

Exposure time: 3min



Dot Blot - Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody [EPR24759-32] (ab289976)

MEK3 (phospho S189) + MEK6 (phospho S207) Dot Blot staining using rabbit Anti-MEK3 (phospho S189) + MEK6 (phospho S207) antibody

Concentration of ab289976: 1/1000 dilution (0.572 µg/ml)

Secondary ab: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051), 1/100000 dilution

Blocking/diluting buffer and concentration: 5% NFDM/TBST

Lane 1: peptide containing phospho S189 of MEK3 (P46734-2)/phospho S207 of MEK6 (P52564-1)

Lane 2: non-phospho peptide of the corresponding region

Exposure time: 3 minutes

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.