abcam

Product datasheet

Anti-MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211) antibody ab4759

2 Images

Overview

Product name	Anti-MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211) antibody
Description	Rabbit polyclonal to MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211)
Host species	Rabbit
Specificity	This antibody reacts with MEK 3 and MEK 6 (93% homologous). This antibody shows some cross-reactivity with MEK 4 when tested in a system with high MEK 4 expression levels. It does not react with any other MEK isoforms.
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** a wide range of other species
Immunogen	Synthetic peptide corresponding to Human MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211).
Positive control	Mal-E-tagged fusion protein expressing MEK 6, left inactivated or activated by adding MEKK, Anisomycin treated A549 cell line
General notes	Mitogen Activated Protein Kinase Kinases 3 and 6 (MEK 3/6 or MKK 3/6) are 42 kDa members of a tyrosine/threonine protein kinase family that activate p38, which is part of the inflammation/stress signaling pathway. Phosphorylation of MEK3 and 6 by MEKK1 on serine 189 and threonine 193 (serine 207 and threonine 211 for MEK6) in the catalytic domain activates the proteins and enables them to phosphorylate p38. 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 or -80°C. Avoid repeated freeze / thaw

	cycles.
Storage buffer	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 0.1% BSA BSA is IgG and protease free
Purity	Immunogen affinity purified
Purification notes	Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated MEK 3. The final product is generated by affinity chromatography using a MEK 3 derived peptide that is phosphorylated at serine 189 and threonine 193.
Primary antibody notes	Mitogen Activated Protein Kinase Kinases 3 and 6 (MEK 3/6 or MKK 3/6) are 42 kDa members of a tyrosine/threonine protein kinase family that activate p38, which is part of the inflammation/stress signaling pathway. Phosphorylation of MEK3 and 6 by MEKK1 on serine 189 and threonine 193 (serine 207 and threonine 211 for MEK6) in the catalytic domain activates the proteins and enables them to phosphorylate p38.
Clonality	Polyclonal
Isotype	IgG

Applications

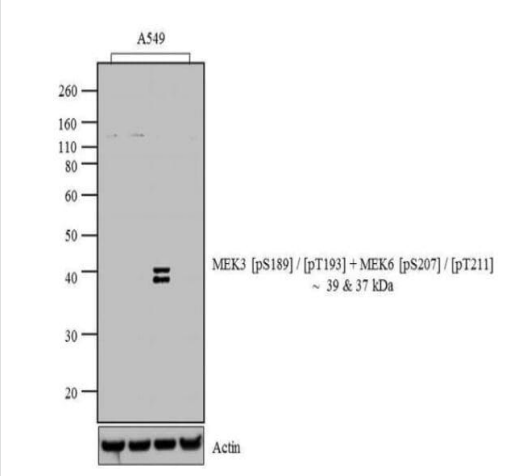
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab4759 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 39.3 kDa.

Target

Images



Western blot - Anti-MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211) antibody (ab4759)

All lanes : Anti-MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211) antibody (ab4759) at 1/2000 dilution

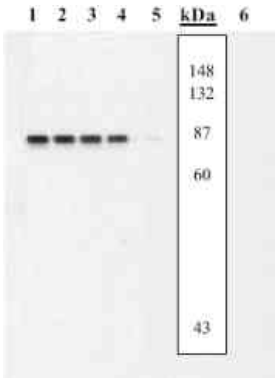
Lane 1 : A549 whole cell extract
Lane 2 : A549 treated for 20 minutes with 200 nM of PMA
Lane 3 : A549 treated for 30 minutes with 25 µg/mL of Anisomycin
Lane 4 : A549 treated for 40 minutes with UV

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L) Secondary Antibody, HRP conjugate at 1/2500 dilution

Predicted band size: 39.3 kDa
Observed band size: 39, 37 kDa

Two bands ~ 37 and 39 kDa corresponding to MEK3 (pS189/pT193) + MEK6 (pS207/pT211) was observed in Anisomycin treated cell line tested



Western blot - Anti-MEK3 (phospho S189/T193) + MEK6 (phospho S207/T211) antibody (ab4759)

Peptide Competition: Extracts prepared from background extracts with Mal-E tagged fusion protein expressing MEK 6 left inactivated (6) or with MEKK added for activation (1-5) were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were blocked with a 5% BSA-TBST buffer overnight at 4^{o}C, then were incubated with 0.50 µg/mL ab4759 antibody for two hours at room temperature in a 3% BSA-TBST buffer, following prior incubation with: no peptide (1, 6), the non-phosphopeptide corresponding to the phosphopeptide immunogen (2), a generic hosphoserine-containing peptide (3), a generic phosphothreonine-containing peptide (4), or the phosphopeptide immunogen (5). After washing, the membrane was incubated with goat F(ab"e;)2 anti-rabbit IgG alkaline phosphatase and signals were detected. The data show that only the phosphopeptide corresponding to MEK3/6 [pSpT189/193]/[pSpT207/211] blocks the antibody signal, demonstrating the specificity of the antibody. Please note that the Mal-E-tagged fusion protein expressing MEK6 runs at ~81 kDa.