

### Anti-MEK1 antibody [Y77] ab32576

敲除验证
重组
RabMAb

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#### 概述

产品名称	Anti-MEK1抗体[Y77]
描述	兔单克隆抗体[Y77] to MEK1
宿主	Rabbit
特异性	The antibody does not crossreact with other MAP kinase kinase family members.
经测试应用	<b>适用于:</b> Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
种属反应性	<b>与反应:</b> Human
免疫原	Synthetic peptide within Human MEK1 aa 350-450 (C terminal). The exact sequence is proprietary.
阳性对照	WB: Wild-type HAP1 whole cell lysate; A431, Jurkat, HeLa and HepG2 whole cell lysates. IHC-P: Urinary bladder carcinoma tissue, human kidney tissue. ICC/IF: HeLa, A431 cells. IP: Jurkat cell lysate Flow Cyt (intra): HeLa cells
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>

纯度	Protein A purified
克隆	单克隆
克隆编号	Y77
同种型	IgG

应用

The Abpromise guarantee      **Abpromise™**承诺保证使用ab32576于以下的经测试应用

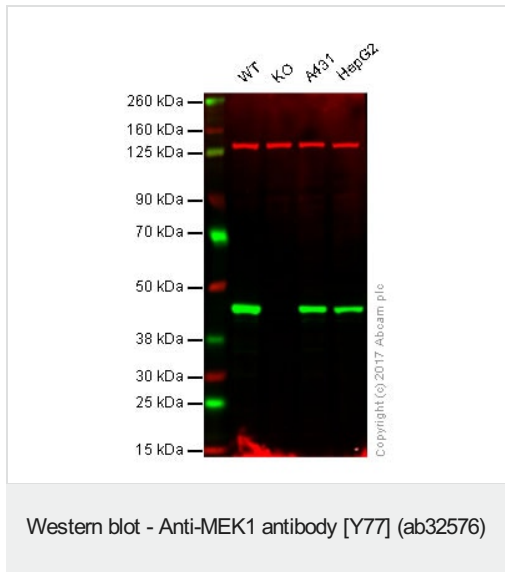
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/30 - 1/40. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/50.
WB		1/10000. Detects a band of approximately 45 kDa (predicted molecular weight: 43 kDa).
IP		1/20 - 1/50.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> .

靶标

功能	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.
组织特异性	Widely expressed, with extremely low levels in brain.
疾病相关	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.
序列相似性	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily. Contains 1 protein kinase domain.
翻译后修饰	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

## 图片



**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** MEK1 knockout HAP1 whole cell lysate (20 µg)

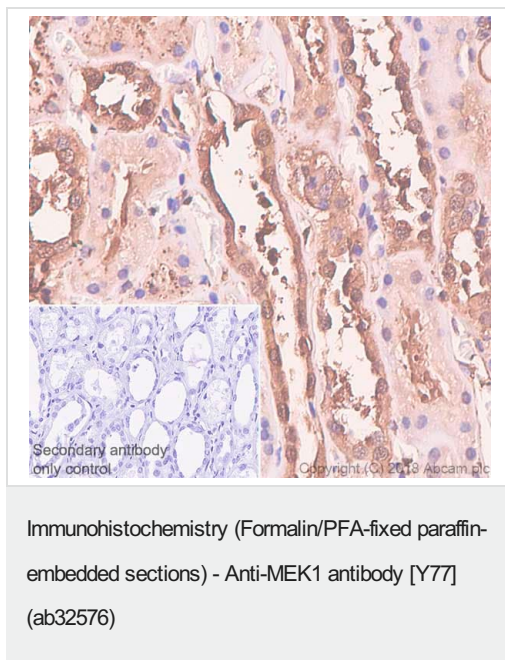
**Lane 3:** A431 whole cell lysate (20 µg)

**Lane 4:** HepG2 whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab32576 (unpurified) observed at 43 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

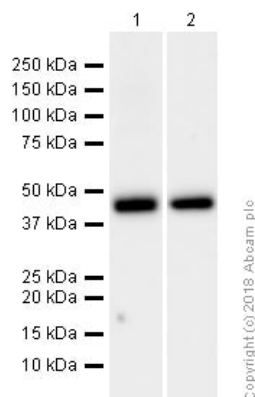
ab32576 was shown to specifically react with MEK1 in wild-type HAP1 cells as signal was lost in MEK1 knockout cells. Wild-type and MEK1 knockout samples were subjected to SDS-PAGE.

Ab32576 and [ab18058](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/10000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney tissue sections labeling MEK1 with purified ab32576 at 1/100 dilution (3.28 µg/ml). Heat mediated antigen retrieval was performed using heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-MEK1 antibody [Y77] (ab32576)

**All lanes :** Anti-MEK1 antibody [Y77] (ab32576) at 1/10000 dilution (Purified)

**Lane 1 :** Jurkat (Human T cell leukemia T lymphocyte) whole cell lysates

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

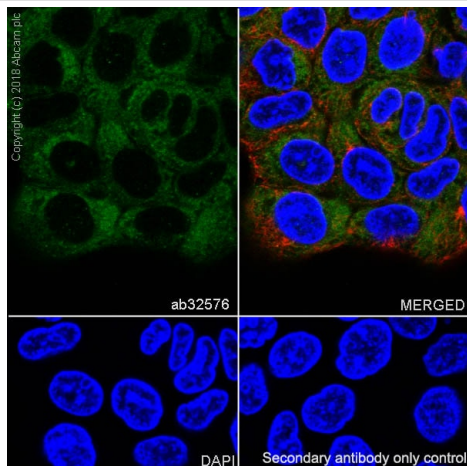
Lysates/proteins at 20 µg per lane.

### Secondary

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

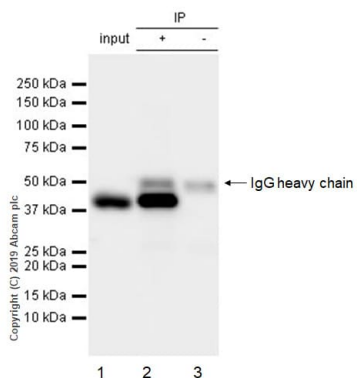
**Predicted band size:** 43 kDa

**Observed band size:** 45 kDa



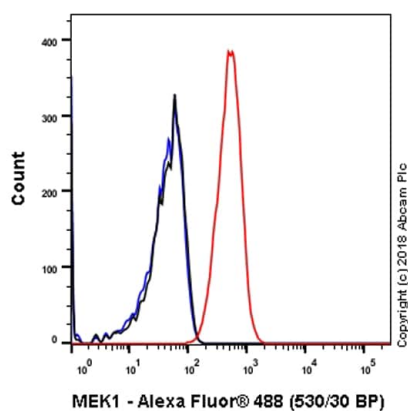
Immunocytochemistry/ Immunofluorescence - Anti-MEK1 antibody [Y77] (ab32576)

Immunocytochemistry/ Immunofluorescence analysis of A431 (Human epidermoid carcinoma epithelial cell) cells labeling MEK1 with purified ab32576 at 1/50 dilution (6.6 µg/ml). Cells were fixed in 100% Methanol. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



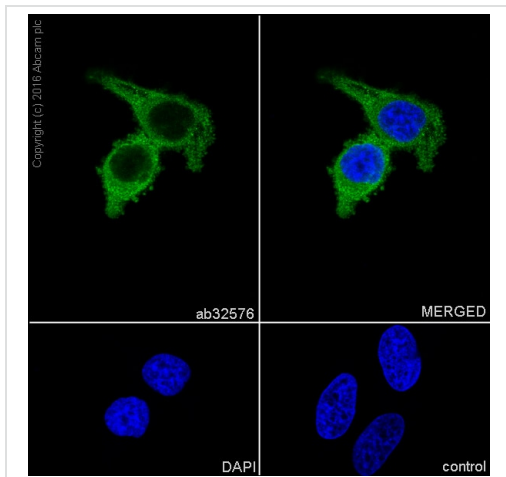
Immunoprecipitation - Anti-MEK1 antibody [Y77]  
(ab32576)

ab32576 (purified) at 1/20 dilution (2ug) immunoprecipitating MEK1 in Jurkat whole cell lysate. Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 10ug  
Lane 2 (+): ab32576 & Jurkat whole cell lysate  
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab32576 in Jurkat whole cell lysate  
For western blotting, VeriBlot for IP secondary antibody (HRP) (**ab131366**) was used at 1/1000 dilution.  
Blocking and diluting buffer: 5% NFDm/TBST.



Flow Cytometry (Intracellular) - Anti-MEK1 antibody  
[Y77] (ab32576)

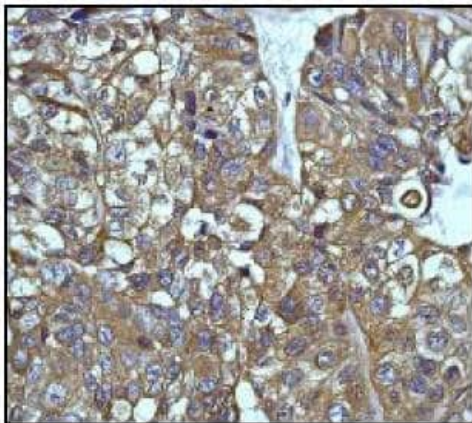
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling MEK1 with purified ab32576 at 1/30 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-MEK1 antibody [Y77] (ab32576)

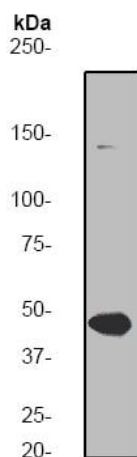
Immunocytochemistry/Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) labeling MEK1 with purified ab32576 at 1/500 dilution (5 µg/ml). Cells were fixed with 4% PFA and permeabilized with 0.1% triton X-100.

**ab150077** Goat anti rabbit IgG (Alexa Fluor® 488) at 1/1000 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI. PBS was used instead of the primary antibody as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEK1 antibody [Y77] (ab32576)

ab32576 (unpurified) at a 1/250 dilution staining MEK1 in human urinary bladder carcinoma tissue by IHC-P.



Anti-MEK1 antibody [Y77] (ab32576) at 1/10000 dilution  
(unpurified) + Jurkat (Human T cell leukemia cell line from peripheral  
blood) cell lysate

**Predicted band size:** 43 kDa

**Observed band size:** 45 kDa

Western blot - Anti-MEK1 antibody [Y77] (ab32576)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-MEK1 antibody [Y77] (ab32576)

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