# abcam

### Product datasheet

## Anti-Raf1 (phospho S259) antibody [EPR3433(2)] ab173539



重组 RabMAb

#### 13 References 7 图像

#### 概述

产品名称 Anti-Raf1 (phospho S259)抗体[EPR3433(2)]

描述 兔单克隆抗体[EPR3433(2)] to Raf1 (phospho S259)

宿主 Rabbit

经测试应用 适用于: WB, Dot blot

不适用于: Flow Cyt,ICC/IF or IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Treated C6, NIH/3T3 and HEK-293 whole cell lysates.

常规说明 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**.

#### 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 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR3433(2)

同种型 lgG

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab173539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
WB		1/1000 - 1/5000. Predicted molecular weight: 73 kDa.
Dot blot		Use at an assay dependent concentration.

应用说明 Is unsuitable for Flow Cyt,ICC/IF or IP.

2111	*

功能

Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. Part of the Ras-dependent signaling pathway from receptors to the nucleus. Protects cells from apoptosis mediated by STK3.

组织特异性

In skeletal muscle, isoform 1 is more abundant than isoform 2.

疾病相关

Defects in RAF1 are the cause of Noonan syndrome type 5 (NS5) [MIM:611553]. Noonan syndrome (NS) is a disorder characterized by dysmorphic facial features, short stature, hypertelorism, cardiac anomalies, deafness, motor delay, and a bleeding diathesis. It is a genetically heterogeneous and relatively common syndrome, with an estimated incidence of 1 in 1000-2500 live births.

Defects in RAF1 are the cause of LEOPARD syndrome type 2 (LEOPARD2) [MIM:611554]. LEOPARD syndrome is an autosomal dominant disorder allelic with Noonan syndrome. The acronym LEOPARD stands for lentigines, electrocardiographic conduction abnormalities, ocular hypertelorism, pulmonic stenosis, abnormalities of genitalia, retardation of growth, and deafness.

序列相似性

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. RAF subfamily.

Contains 1 phorbol-ester/DAG-type zinc finger.
Contains 1 protein kinase domain.

Contains 1 RBD (Ras-binding) domain.

翻译后修饰

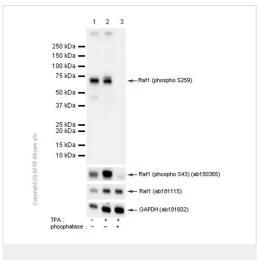
Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation at Thr-269 increases its kinase activity. Phosphorylation at Ser-259 induces the interaction with YWHAZ and inactivates kinase activity. Dephosphorylation of Ser-259 by the complex containing protein phosphatase 1, SHOC2 and M-Ras/MRAS relieves inactivation, leading to stimulate RAF1 activity.

细胞定位

 $\label{lem:cytoplasm} \textbf{Cytoplasm}. \textbf{Cell membrane}. \textbf{Colocalizes with RGS14} \textbf{ and BRAF in both the cytoplasm and}$ 

membranes.

图片



Western blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

**All lanes :** Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539) at 1/5000 dilution (Purified)

**Lane 1**: HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates

**Lane 2**: HEK-293 (Human embryonic kidney epithelial cell) treated with 100nM Phorbol-12-myristate-13-acetate for 1 hour whole cell lysates

**Lane 3**: HEK-293 (Human embryonic kidney epithelial cell) treated with 100nM Phorbol-12-myristate-13-acetate for 1 hour whole cell lysates, then incubated with phosphatase

Lysates/proteins at 15 µg per lane.

#### Secondary

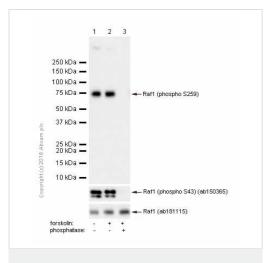
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 73 kDa **Observed band size:** 73 kDa

ab181602 was used as GAPDH loading control.

ab181115 was used to detect Raf1.

ab150365 was used to detect Raf1 phospho S43.



Western blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

**All lanes :** Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539) at 1/1000 dilution (Purified)

Lane 1: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lane 2: NIH/3T3 (Mouse embryonic fibroblast) treated with 5uM

forskolin for 10 minutes whole cell lysates

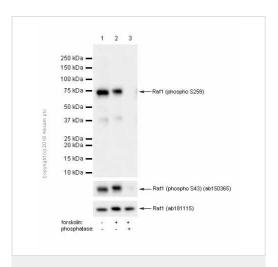
**Lane 3**: NIH/3T3 (Mouse embryonic fibroblast) treated with 5uM forskolin for 10 minutes whole cell lysates, then incubated with phosphatase

Lysates/proteins at 15 µg per lane.

#### Secondary

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

**Predicted band size:** 73 kDa **Observed band size:** 73 kDa



Western blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

Lane 1 : Anti-Raf1 (phospho S259) antibody [EPR3433(2)]

(ab173539) at 1/1000 dilution (Purified)

Lanes 2-3: Anti-Raf1 (phospho S259) antibody [EPR3433(2)]

(ab173539) at 1/1000 dilution

Lane 1: C6 (Rat glial tumor glial cell) whole cell lysates

Lane 2: C6 (Rat glial tumor glial cell) treated with 30uM forskolin

for 20 minutes whole cell lysates

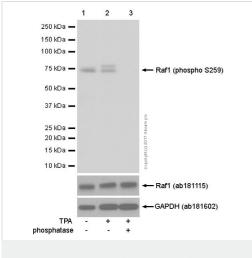
Lane 3: C6 (Rat glial tumor glial cell) treated with 30uM forskolin for 20 minutes whole cell lysates, then incubated with phosphatase

Lysates/proteins at 15 µg per lane.

#### Secondary

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

**Predicted band size:** 73 kDa **Observed band size:** 73 kDa



Western blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

**All lanes :** Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539) at 1/5000 dilution

Lane 1: HEK293 whole cell lysate

**Lane 2**: HEK293 whole cell lysate treated with 100nM Phorbol-12-myristate-13-acetate for 1 hour

**Lane 3**: HEK293 whole cell lysate treated with 100nM Phorbol-12-myristate-13-acetate for 1 hour then incubated with phosphatase

Lysates/proteins at 15 µg per lane.

#### **Secondary**

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

**Predicted band size:** 73 kDa **Observed band size:** 73 kDa

Exposure time: 1 second

Blocking and dilution buffer: 5% NFDM/TBST.

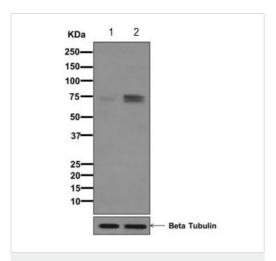
1 2
5ng
1ng
0.1ng
0.01ng

Dot Blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

Dot blot analysis of Raf1 (pS259) peptide (Lane 1) and Raf1 non-phospho peptide (Lane 2) labelling Raf1 (pS259) with ab173539 at a dilution of 1/1000. <a href="mailto:ab97051"><u>ab97051</u></a> (Peroxidase conjugated goat antirabbit lgG (H+L)) was used as the secondary antibody at a dilution of 1/100000.

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.



Western blot - Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539)

**All lanes :** Anti-Raf1 (phospho S259) antibody [EPR3433(2)] (ab173539) at 1/1000 dilution

Lane 1: 293T cell lysates

Lane 2: 293T cell lysates treated with Okadaic Acid + Calyculin A

Lysates/proteins at 10 µg per lane.

Predicted band size: 73 kDa



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