abcam

## Product datasheet

# Anti-Raf1 antibody [RNP1] ab50858

6 References 2 Images

### Overview

| | |
|---|---|
| **Product name** | Anti-Raf1 antibody [RNP1] |
| **Description** | Mouse monoclonal [RNP1] to Raf1 |
| **Host species** | Mouse |
| **Tested applications** | **Suitable for:** WB, ICC/IF |
| **Species reactivity** | **Reacts with:** Human<br>**Predicted to work with:** Chicken, Xenopus laevis, Orangutan |
| **Immunogen** | Synthetic peptide:<br>GQRDSSYYWEIE<br>, corresponding to internal sequence amino acids 334-345 of Human Raf1<br>Run BLAST with Run BLAST with |
| **Positive control** | Extracts and cells from A431 cell line (Human Epidermoid carcinoma) |
| **General notes** | 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.<br>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

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|---|---|
| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. |
| **Storage buffer** | pH: 7.40<br>Preservative: 0.097% Sodium azide<br>Constituent: 0.0268% PBS |
| **Purity** | Protein G purified |
| **Clonality** | Monoclonal |
| **Clone number** | RNP1 |

| | |
|---|---|
| **Myeloma** | NS1 |
| **Isotype** | IgG1 |

## Applications

**The Abpromise guarantee** Our Abpromise guarantee covers the use of ab50858 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** | | Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 73 kDa. |
| **ICC/IF** | | Use at an assay dependent dilution. |

## Target

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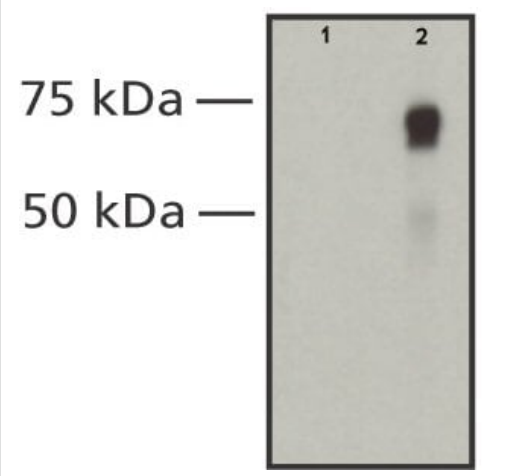
|---|---|
| **Function** | Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. Part of the Ras-dependent signaling pathway from receptors to the nucleus. Protects cells from apoptosis mediated by STK3. |
| **Tissue specificity** | In skeletal muscle, isoform 1 is more abundant than isoform 2. |
| **Involvement in disease** | 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.<br>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. |
| **Sequence similarities** | Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. RAF subfamily.<br>Contains 1 phorbol-ester/DAG-type zinc finger.<br>Contains 1 protein kinase domain.<br>Contains 1 RBD (Ras-binding) domain. |
| **Post-translational modifications** | 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. |
| **Cellular localization** | Cytoplasm. Cell membrane. Colocalizes with RGS14 and BRAF in both the cytoplasm and membranes. |

## Images




Western blot - Anti-Raf1 antibody [RNP1] (ab50858)

**Lane 1 :** Without Raf1 antibody [RNP1] (ab50858)

**Lane 2 :** Anti-Raf1 antibody [RNP1] (ab50858) at 1 µg/ml

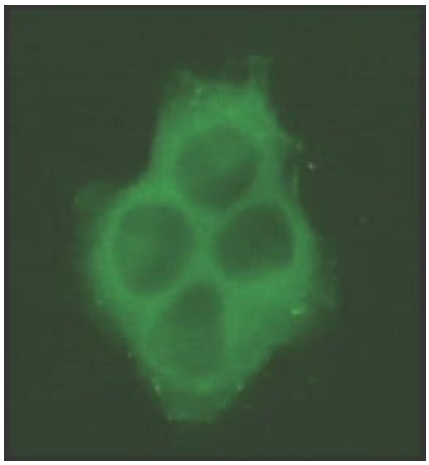
**All lanes :** A431cell extract (Human Epidermoid carcinoma)

**Secondary**

**All lanes :** Goat Anti-Mouse, Peroxidase conjugate

**Predicted band size:** 73 kDa

**Observed band size:** 73 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Raf1 antibody [RNP1] (ab50858)

Localisation of RAF1 protein in the cytoplasm of A431. A431 cells were fixed with 4% paraformaldehyde and permeabilized with 0.2% Triton X-100. The cells were incubated with Monoclonal Anti-RAF1 (ab50858) and further developed with Rabbit Anti-Mouse IgG, FITC-conjugate.



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