Product datasheet

Anti-B Raf (phospho T401) antibody [EPR2208Y] ab68215

Overview

Product name  Anti-B Raf (phospho T401) antibody [EPR2208Y]
Description  Rabbit monoclonal [EPR2208Y] to B Raf (phospho T401)
Host species  Rabbit
Specificity  This antibody detects B Raf phosphorylated on threonine 401.
Tested applications  Suitable for: WB, IP, ICC
Unsuitable for: Flow Cyt or IHC-P
Species reactivity  Reacts with: Mouse, Rat, Human
Immunogen  A synthetic phosphospecific peptide corresponding to residues surrounding threonine 401 of human B Raf.
Positive control  PC-12 cell lysates (cells untreated or treated with TPA)
General notes  This product is a recombinant rabbit monoclonal antibody.
Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents

Properties

Form  Liquid
Storage instructions  Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer  pH: 7.40
Preservative: 0.01% Sodium azide
Constituents: 50% Glycerol, 0.05% BSA
Purity  Tissue culture supernatant
Clonality  Monoclonal
Clone number  EPR2208Y
Isotype  IgG

Applications

1 References  1 Image
Our **Abpromise guarantee** covers the use of ab68215 in the following tested applications.

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

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<th>Application</th>
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<td>IP</td>
<td>1/20.</td>
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<tr>
<td>ICC</td>
<td>1/100 - 1/250.</td>
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**Application notes**

Is unsuitable for Flow Cyt or IHC-P.

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**Target**

**Function**

Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. May play a role in the postsynaptic responses of hippocampal neuron.

**Tissue specificity**

Brain and testis.

**Involvement in disease**

Note=Defects in BRAF are found in a wide range of cancers.
Defects in BRAF may be a cause of colorectal cancer (CRC) [MIM:114500].
Defects in BRAF are involved in lung cancer (LNCR) [MIM:211980].
Defects in BRAF are involved in non-Hodgkin lymphoma (NHL) [MIM:605027]. NHL is a cancer that starts in cells of the lymph system, which is part of the body's immune system. NHLs can occur at any age and are often marked by enlarged lymph nodes, fever and weight loss.
Defects in BRAF 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.
Defects in BRAF are the cause of Noonan syndrome type 7 (NS7) [MIM:613706]. Noonan syndrome is a disorder characterized by facial dysmorphic features such as hypertelorism, a downward eyeslant and low-set posteriorly rotated ears. Other features can include short stature, a short neck with webbing or redundancy of skin, cardiac anomalies, deafness, motor delay and variable intellectual deficits.
Defects in BRAF are the cause of LEOPARD syndrome type 3 (LEOPARD3) [MIM:613707]. LEOPARD3 is a disorder characterized by lentigines, electrocardiographic conduction abnormalities, ocular hypertelorism, pulmonic stenosis, abnormalities of genitalia, retardation of growth, and sensorineural deafness.

Note=A chromosomal aberration involving BRAF is found in pilocytic astrocytomas. A tandem duplication of 2 Mb at 7q34 leads to the expression of a KIAA1549-BRAF fusion protein with a constitutive kinase activity and inducing cell transformation.

**Sequence similarities**

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.

Cellular localization
Nucleus. Cytoplasm. Cell membrane. Colocalizes with RGS14 and RAF1 in both the cytoplasm and membranes.

Images

**All lanes**: Anti-B Raf (phospho T401) antibody [EPR2208Y] (ab68215) at 1/5000 dilution

**Lane 1**: PC-12 cell lysates (cells were untreated)

**Lane 2**: PC-12 cell lysates (cells were treated with TPA)

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size**: 85 kDa

**Observed band size**: 85 kDa

**Please note**: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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