abcam

Product datasheet

Anti-BRAF (phospho S729) antibody [EPR2207] - BSA and Azide free ab248008

Recombinant

RabMAb

3 Images

Overview

Immunogen

Product name Anti-BRAF (phospho S729) antibody [EPR2207] - BSA and Azide free

Description Rabbit monoclonal [EPR2207] to BRAF (phospho S729) - BSA and Azide free

Host species Rabbit

Specificity Detects B Raf only when phosphorylated on serine 729.

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Rat

Predicted to work with: Mouse, Human

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

General notes ab248008 is the carrier-free version of **ab124794**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

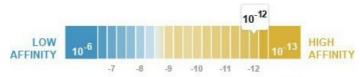
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Dissociation constant (K_D) $K_D = 9.00 \times 10^{-12} M$



Learn more about K_D

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR2207

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab248008 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 at an assay dependent concentration. Predicted molecular weight: 84 kDa.

Application notes Is unsuitable for Flow Cyt,ICC/IF or IP.

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 diseaseNote=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.

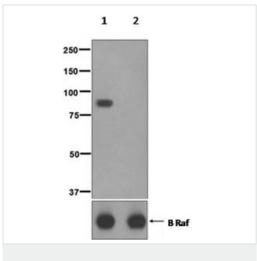
Contains 1 protein kinase domain.

Contains 1 RBD (Ras-binding) domain.

Cellular localization

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

Images



Western blot - Anti-BRAF (phospho S729) antibody [EPR2207] - BSA and Azide free (ab248008) **All lanes :** Anti-BRAF (phospho S729) antibody [EPR2207] (ab124794) at 1/1000 dilution

Lane 1: PC-12 cell lysates (untreated)

Lane 2: PC-12 cell lysates treated with Lambda Phosphatase

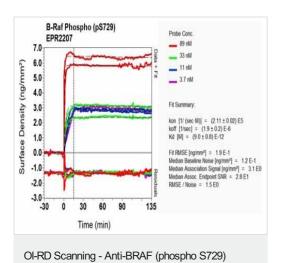
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 84 kDa

This data was developed using <u>ab124794</u>, the same antibody clone in a different buffer formulation.



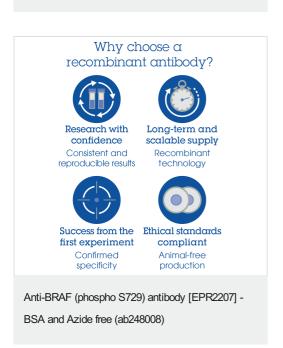
antibody [EPR2207] - BSA and Azide free

(ab248008)

This data was developed using $\underline{ab124794}$, the same antibody clone in a different buffer formulation. Equilibrium disassociation constant (K_D)

Learn more about KD

Click here to learn more about K_D



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