abcam

Product datasheet

Anti-B Raf antibody [EP152Y] ab33899

KO VALIDATED Recombinant RabMAb

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Overview

Product name	Anti-B Raf antibody [EP152Y]
Description	Rabbit monoclonal [EP152Y] to B Raf
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, IP **Unsuitable for:** Flow Cyt or ICC
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. within Human B Raf aa 50-150. The exact sequence is proprietary. Database link: P15056
Positive control	HeLa cell lysate, human prostate cancer tissue. This antibody also reacts with rat brain tissue.
General notes	Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol, 0.05% BSA
Clonality	Monoclonal
Clone number	EP152Y
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab33899** 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	★★★★★	1/1000 - 1/5000. Detects a band of approximately 87 kDa (predicted molecular weight: 85 kDa).
IHC-P	★★☆☆☆	Use at an assay dependent concentration.
IP		1/50.

Application notes Is unsuitable for Flow Cyt or ICC.

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.

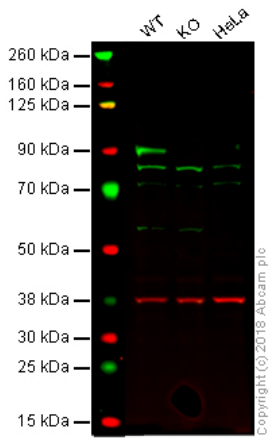
Tissue specificity Brain and testis.

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

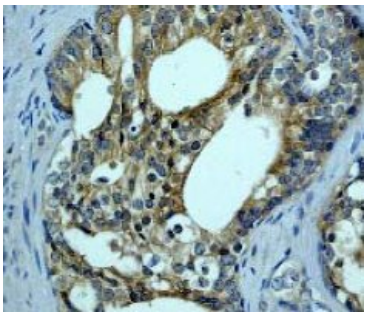


Western blot - Anti-B Raf antibody [EP152Y] (ab33899)

Lane 1: Wild-type HAP1 whole cell lysate (40 µg)
Lane 2: B Raf knockout HAP1 whole cell lysate (40 µg)
Lane 3: HeLa whole cell lysate (40 µg)

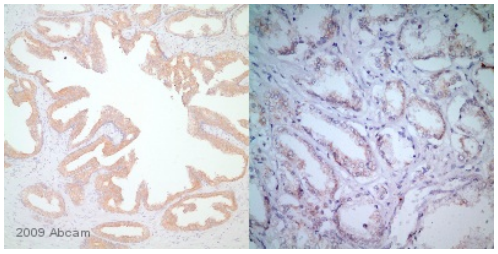
Lanes 1 - 3: Merged signal (red and green). Green - ab33899 observed at 90 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab33899 was shown to recognize B Raf in wild-type HAP1 cells as signal was lost at the expected MW in B Raf knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and B Raf knockout samples were subjected to SDS-PAGE. ab33899 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 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) - Anti-B Raf antibody [EP152Y] (ab33899)

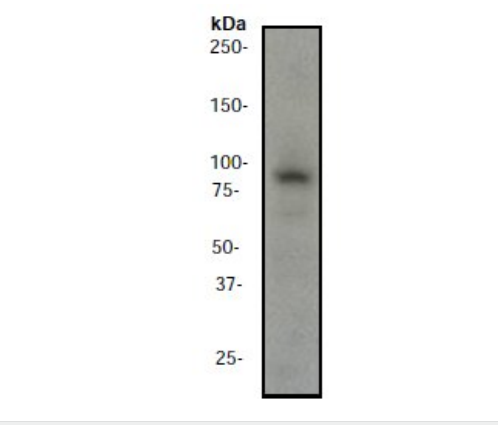
This image shows paraffin embedded human prostate cancer tissue sample stained with ab33899 at 1/250 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-B Raf antibody [EP152Y] (ab33899)

This image is courtesy of an Abreview submitted by Sedar Balci

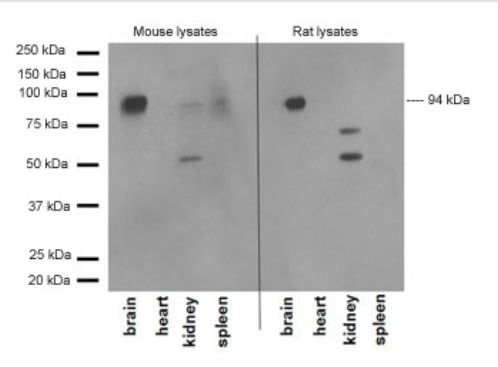
ab33899 staining B Raf cells from human prostate tissue by immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). Cells were formaldehyde fixed and permeabilized in PBS-Tween 20 prior to blocking in 70% serum for 10 minutes at 25°C. The primary antibody was diluted 1/250 and incubated with the sample for 1 hour at 25°C. A biotin conjugated goat polyclonal to mouse Ig was used as the secondary.



Western blot - Anti-B Raf antibody [EP152Y] (ab33899)

Anti-B Raf antibody [EP152Y] (ab33899) at 1/5000 dilution + HeLa cell lysate

Predicted band size: 85 kDa
Observed band size: 87 kDa



Western blot - Anti-B Raf antibody [EP152Y] (ab33899)

All lanes : Anti-B Raf antibody [EP152Y] (ab33899) at 1/1000 dilution

Lane 1 : Lysate prepared from mouse brain
Lane 2 : Lysate prepared from mouse heart
Lane 3 : Lysate prepared from mouse kidney
Lane 4 : Lysate prepared from mouse spleen
Lane 5 : Lysate prepared from rat brain
Lane 6 : Lysate prepared from rat heart
Lane 7 : Lysate prepared from rat kidney
Lane 8 : Lysate prepared from rat spleen

Predicted band size: 85 kDa

Exposure time: 3 minutes

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