

# **B-raf Antibody**

Catalog # ASC11141

## **Product Information**

**Application** WB, E **Primary Accession** P15056

Other Accession P15056, 50403720 Reactivity Human, Mouse, Rat

Host Chicken
Clonality Polyclonal
Isotype IgY
Calculated MW 84437
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes** B-raf antibody can be used for detection of B-raf by Western blot at 1 - 2

□g/mL.

## **Additional Information**

Gene ID 673

Other Names Serine/threonine-protein kinase B-raf, 2.7.11.1, Proto-oncogene B-Raf, p94,

v-Raf murine sarcoma viral oncogene homolog B1, BRAF, BRAF1, RAFB1

Target/Specificity BRAF;

**Reconstitution & Storage** B-raf antibody can be stored at 4°C for three months and -20°C, stable for up

to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

**Precautions** B-raf Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name BRAF ( HGNC:1097)

Synonyms BRAF1, RAFB1

**Function** Protein kinase involved in the transduction of mitogenic signals from the cell

membrane to the nucleus (Probable). Phosphorylates MAP2K1, and thereby activates the MAP kinase signal transduction pathway (PubMed: <u>21441910</u>, PubMed: <u>29433126</u>). Phosphorylates PFKFB2 (PubMed: <u>36402789</u>). May play a

role in the postsynaptic responses of hippocampal neurons

(PubMed: 1508179).

**Cellular Location** Nucleus. Cytoplasm. Cell membrane. Note=Colocalizes with RGS14 and RAF1

in both the cytoplasm and membranes.

**Tissue Location** 

Brain and testis.

# **Background**

B-raf Antibody: B-raf belongs to the raf/mil family of serine/threonine protein kinases and plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. The Ras/Raf/MEK/ERK and Ras/PI3K/PTEN/Akt pathways interact with each other to regulate growth and in some cases tumorigenesis. Mutations in B-raf have been associated with several cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, thyroid carcinoma, non-small cell lung carcinoma, and adenocarcinoma of lung, leading to speculation on the possibility of B-raf as a therapeutic target for treating cancers. Mutations in this gene have also been associated with cardiofaciocutaneous syndrome (CFCS), a disease characterized by heart defects, mental retardation and a distinctive facial appearance.

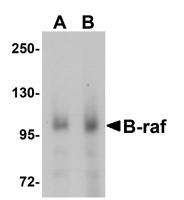
### References

McCubrey JA, Steelman LS, Chappell WH, et al. Roles of the RAF/MEK/ERK pathway in cell growth, malignant transformation and drug resistance. Biochim. Biophys. Acta2007; 1773:1263-84.

Madhunapantula SV and Robertson GP. Is B-raf a good therapeutic target for melanoma and other malignancies? Cancer Res.2008; 68:5-8.

Sarkozy A, Carta C, Moretti S, et al. Germline BRAF mutations in Noonan, LEOPARD, and cardiofaciocutaneous syndromes: molecular diversity and associated phenotypic spectrum. Hum. Mutat.2009; 30:695-702.

# **Images**



Western blot analysis of B-raf in human brain tissue lysate with B-raf antibody at (A) 1 and (B) 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.