

### **B-raf Antibody**

Catalog # ASC11141

#### **Specification**

## **B-raf Antibody - Product Information**

**Application Primary Accession** Other Accession Reactivity Host Clonality

Isotype **Application Notes**  WB. E P15056

P15056, 50403720 Human, Mouse, Rat

Chicken **Polyclonal** 

IaY

B-raf antibody can be used for detection of

B-raf by Western blot at 1 - 2 μg/mL.

### **B-raf Antibody - Additional Information**

Gene ID 673

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.

#### **B-raf Antibody - 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:<a href="http://www.uniprot.org/citations/21441910" target=" blank">21441910</a>, PubMed:<a href="http://www.uniprot.org/citations/29433126" target="blank">29433126</a>). Phosphorylates PFKFB2 (PubMed:<a href="http://www.uniprot.org/citations/36402789" target=" blank">36402789</a>). May play a role in the postsynaptic responses of hippocampal neurons (PubMed:<a href="http://www.uniprot.org/citations/1508179" target=" blank">1508179</a>).

### **Cellular Location**

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



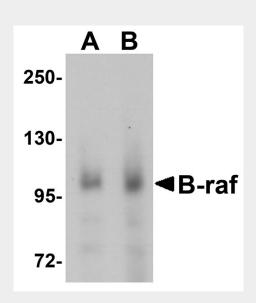
**Tissue Location**Brain and testis.

## **B-raf Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **B-raf Antibody - Images**



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

#### **B-raf Antibody - 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.

#### **B-raf Antibody - 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.