

**B-raf Antibody**  
**Catalog # ASC11141****Specification**

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**B-raf Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">P15056</a>
Other Accession	<a href="#">P15056</a> , <a href="#">50403720</a>
Reactivity	Human, Mouse, Rat
Host	Chicken
Clonality	Polyclonal
Isotype	IgY
Application Notes	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:[21441910](http://www.uniprot.org/citations/21441910), PubMed:[29433126](http://www.uniprot.org/citations/29433126)). Phosphorylates PFKFB2 (PubMed:[36402789](http://www.uniprot.org/citations/36402789)). May play a role in the postsynaptic responses of hippocampal neurons (PubMed:[1508179](http://www.uniprot.org/citations/1508179)).

**Cellular Location**

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

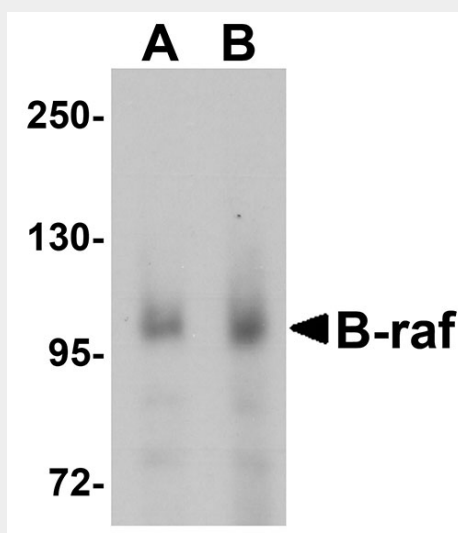
**Tissue Location**

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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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  $\mu\text{g/mL}$ .

**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. Acta* 2007; 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.