

**BRAF Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1086a****Specification**

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**BRAF Antibody - Product Information**

Application	<b>WB, IHC, IF</b>
Primary Accession	<a href="#">P15056</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>

**Description**

BRAF(V-raf murine sarcoma viral oncogene homolog B1 ) is the main effectors recruited by GTP-bound Ras to activate the MEK-MAP kinase pathway. B-Raf contains three consensus Akt phosphorylation sites (Ser364, Ser428, and Thr439). B-Raf is a key regulatory molecule of the mitogen-activated protein kinase kinase (MEK), it has a long amino-terminal region, the region is essential for homo-dimerization of B-Raf and hetero-dimerization of B-Raf and c-Raf at the plasma membrane, followed by phosphorylation of Thr118 in the amino-terminal B-Raf-specific region. Notably, in calcium ionophore-stimulated HeLa cells, B-Raf could propagate signals to MEK under the basal level of GTP-Ras. Expression of Raf-B is highly restricted with highest levels in the cerebrum and testes and defects in braf are involved in a wide range of cancers. The BRAF gene mutation is frequently detected in papillary thyroid carcinoma, melanocytic nevi, primary cutaneous melanomas and colorectal cancers.

**Immunogen**

Purified recombinant fragment of BRAF expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**BRAF Antibody - 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

**Dilution**

WB ~ 1/500 - 1/2000

IHC ~ 1/200 - 1/1000

IF ~ 1:200 ~ 1000.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

BRAF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## BRAF 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

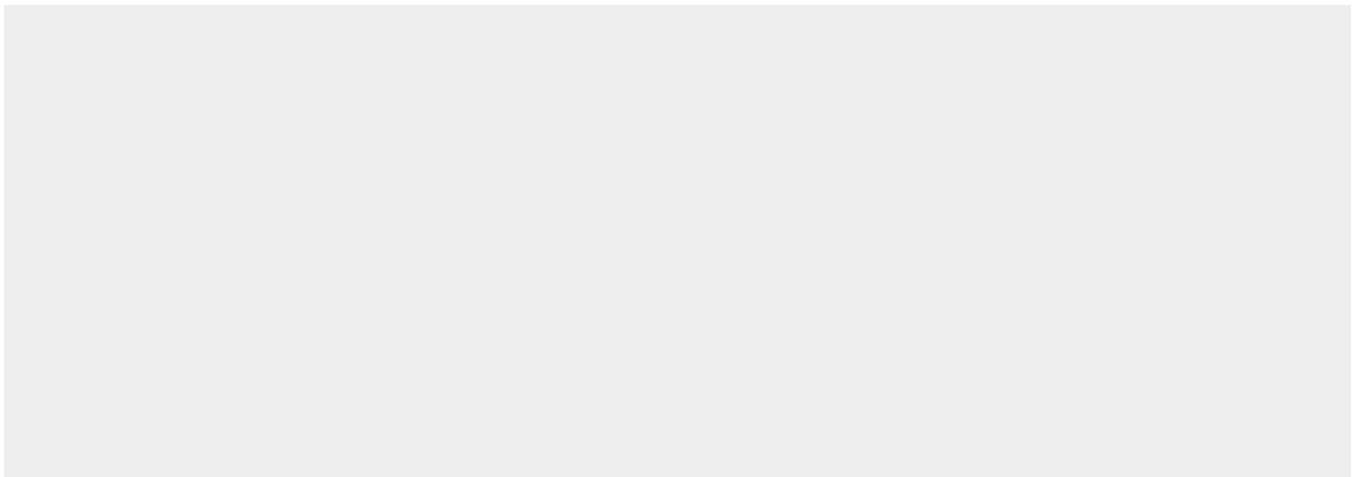
Brain and testis.

## BRAF 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](#)

## BRAF Antibody - Images



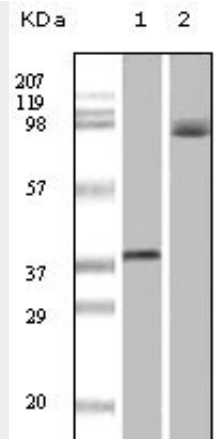


Figure 1: Western blot analysis using BRAF mouse mAb against truncated recombinant Braf (1) and A431 cell lysate (2).

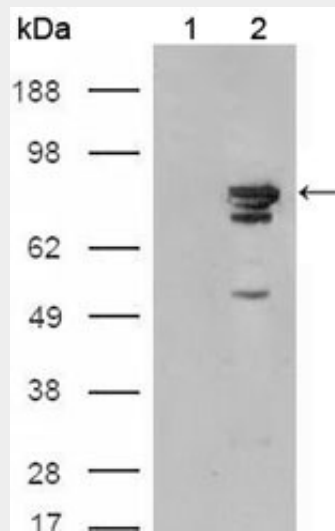


Figure 2: Western blot analysis using BRAF mouse mAb against HEK293T cells transfected with the pCMV6-ENTRY control (1) and pCMV6-ENTRY Braf cDNA (2).

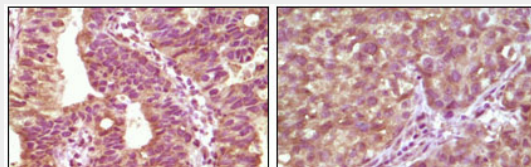


Figure 3: Immunohistochemical analysis of paraffin-embedded human bladder carcinoma tissue(left) and lung carcinoma tissue (right) showing cytoplasmic localization using BRAF mouse mAb with DAB staining.

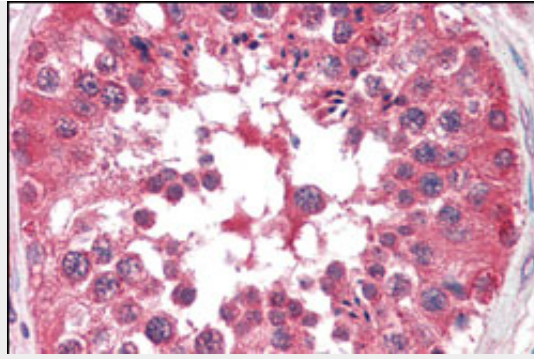


Figure 4: Immunohistochemical analysis of paraffin-embedded human testis tissues using BRAF mouse mAb.

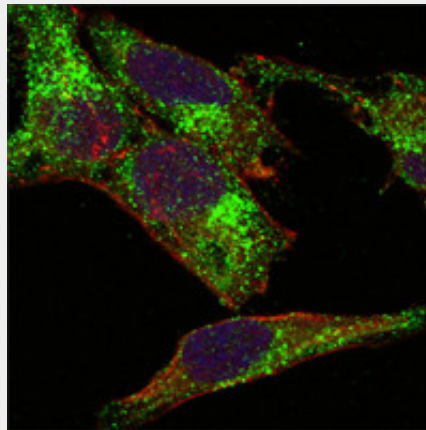


Figure 3: Confocal immunofluorescence analysis of Hela cells using anti-INHA mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

#### **BRAF Antibody - References**

1. Rapp, U.R., et al. 1983. Proc. Natl. Acad. Sci. USA. 80:4218-4222.
2. Kim J, Giuliano AE, Turner RR. 2006. Ann Surg. Nov, 244(5): 799-804.
3. Fullen DR, Poynter JN, Lowe L, 2006. Mod Pathol. 19(10): 1324-1332.
4. Terai K, Matsuda M. 2006. MBO J. 25(15):3556-3564.
5. Noda H, Kato Y, Yoshikawa H, 2006. J Exp Clin Cancer Res. 25(2):235-242.