

# BRAF Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM1821a

## Product Information

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Application	WB, IF, E
Primary Accession	<a href="#">P15056</a>
Other Accession	<a href="#">NP_004324</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1κ
Clone Names	125CT13.3.5
Calculated MW	84437

## Additional Information

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Gene ID	673
Other Names	Serine/threonine-protein kinase B-raf, Proto-oncogene B-Raf, p94, v-Raf murine sarcoma viral oncogene homolog B1, BRAF, BRAF1, RAFB1
Target/Specificity	This BRAF Monoclonal antibody is generated from mouse immunized with BRAF recombinant protein.
Dilution	WB~~1:1000 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. 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.

## Protein Information

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Name	BRAF ( <a href="#">HGNC:1097</a> )
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](#), PubMed:[29433126](#)). Phosphorylates PFKFB2 (PubMed:[36402789](#)). 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.

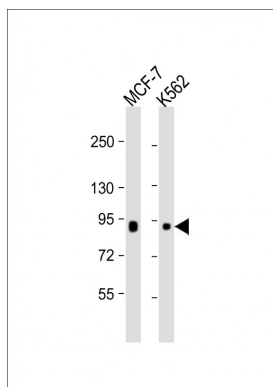
## Background

This gene encodes a protein belonging to the raf/mil family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene are associated with cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance. Mutations in this gene have also been associated with various cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, thyroid carcinoma, non-small cell lung carcinoma, and adenocarcinoma of lung. A pseudogene, which is located on chromosome X, has been identified for this gene.

## References

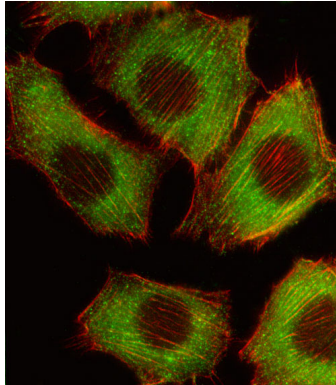
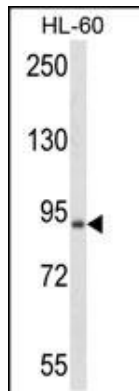
Mutational analyses of the BRAF, KRAS, and PIK3CA genes in oral squamous cell carcinoma. Bruckman KC, et al. Oral Surg Oral Med Oral Pathol Oral Radiol Endod, 2010 Aug 31. PMID 20813562.  
BRAF Mutation Is Rare in Advanced-Stage Low-Grade Ovarian Serous Carcinomas. Wong KK, et al. Am J Pathol, 2010 Aug 27. PMID 20802181.  
NRAS mutations are rare in colorectal cancer. Irahara N, et al. Diagn Mol Pathol, 2010 Sep. PMID 20736745.  
Molecular Testing for Somatic Mutations Improves the Accuracy of Thyroid Fine-needle Aspiration Biopsy. Moses W, et al. World J Surg, 2010 Aug 12. PMID 20703476.  
Identification of several novel non-p.R132 IDH1 variants in thyroid carcinomas. Hemerly JP, et al. Eur J Endocrinol, 2010 Aug 11. PMID 20702649.

## Images



All lanes : Anti-BRAF Antibody at 1:1000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of anti-BRAF Antibody in HL-60 cell line lysates (35µg/lane). BRAF (arrow) was detected using the purified Mab.



Fluorescent image of C2C12 cell stained with BRAF Antibody(Cat#AM1821a/SG100521B).C2C12 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with BRAF primary antibody (1:25, 1 h at 37°C. For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-mouse antibody (green) was used (1:400, 50 min at 37°C.Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C.BRAF immunoreactivity is localized to Cytoplasm significantly.

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