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BRAF Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1821a

Specification

BRAF Antibody - Product Information

Application	**IF, WB,E**
Primary Accession	P15056
Other Accession	NP_004324
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1κ**
Calculated MW	**84437**

BRAF Antibody - Additional Information

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
IF~~1:10~50
WB~~1:1000

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.

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, 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.

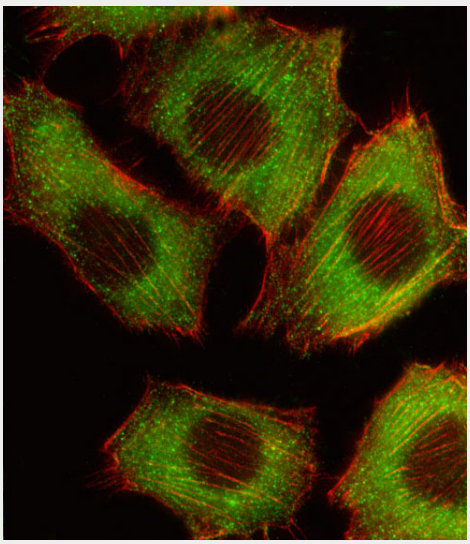
Tissue Location
Brain and testis.

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 Cytomety
- Cell Culture

BRAF Antibody - Images



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℃. For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-mouse antibody (green) was used (1:400, 50 min at 37℃.Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃.BRAF immunoreactivity is localized to Cytoplasm significantly.

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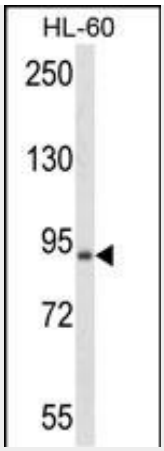
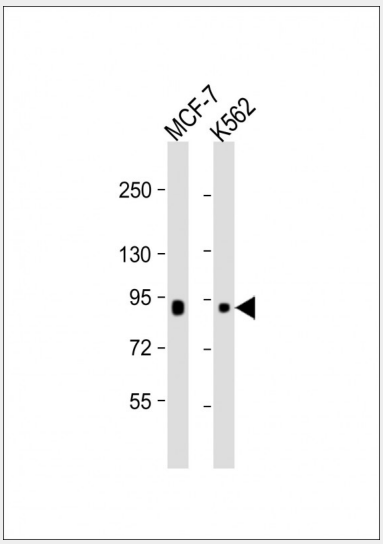


Western blot analysis of anti-BRAF Antibody in HL-60 cell line lysates (35µg/lane). BRAF (arrow) was detected using the purified Mab.



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.

BRAF Antibody - 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.

BRAF Antibody - 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.
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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.