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BRAF Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1264a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	P15056
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	1H12
Isotype	IgG1
Calculated MW	84437
Description	BRAF: v-raf murine sarcoma viral oncogene homolog B1, also known as BRAF1; RAFB1; B-RAF1; FLJ95109. Entrez Protein NP_004324. It is the main effectors recruited by GTP-bound Ras to activate the MEK-MAP kinase pathway. B-Raf contains three consensus Akt phosphorylationsites (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 highestlevels 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 human BRAF expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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 ICC~~N/A E~~N/A
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.

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.

References

1. J Clin Oncol. 2008 Dec 10;26(35):5705-12. 2. Endocr Relat Cancer. 2006 Mar;13(1):257-69.

Images

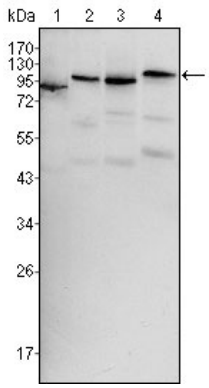


Figure 1: Western blot analysis using BRAF mouse mAb against Hela (1), HL60 (2), HepG2 (3) and NIH/3T3 (4) cell lysate.

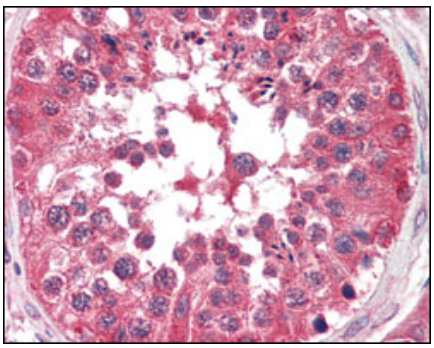
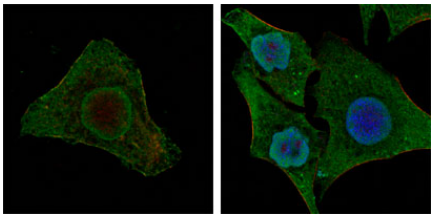


Figure 2: Immunohistochemical analysis of paraffin-embedded human testis tissues using BRAF mouse mAb.

Figure 3: Confocal immunofluorescence analysis of MCF-7 (left) and HepG2 (right) cells using BRAF mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye



Citations

- HNF4α is a therapeutic target that links AMPK to WNT signalling in early-stage gastric cancer.

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