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BRAF Antibody (S578)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7810g

Product Information

Application	WB, IHC-P, E
Primary Accession	P15056
Other Accession	P11346, P28028, Q04982, P14056, O19004, P04627, P10398
Reactivity	Human
Predicted	Mouse, Pig, Rat, Chicken, Drosophila
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10941
Calculated MW	84437
Antigen Region	557-586

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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 557-586 amino acids from human BRAF.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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 (S578) 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.

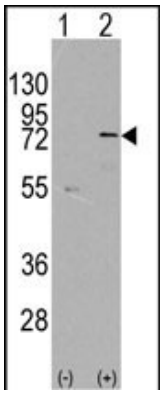
Background

BRAF, a member of the RAF subfamily of Ser/Thr protein kinases, is involved in the transduction of mitogenic signals from the cell membrane to the nucleus. It may play a role in the postsynaptic responses of hippocampal neurons. This cytoplasmic protein is expressed in brain and testis. Defects in BRAF are involved in a wide range of cancers including lung cancer and non-Hodgkin lymphoma (NHL). This protein contains 1 zinc-dependent phorbol-ester and DAG binding domain.

References

Hingorani, S.R., et al., Cancer Res. 63(17):5198-5202 (2003).
Lee, J.W., et al., Br. J. Cancer 89(10):1958-1960 (2003).
Davies, H., et al., Nature 417(6892):949-954 (2002).
Naoki, K., et al., Cancer Res. 62(23):7001-7003 (2002).
Stephens, R.M., et al., Mol. Cell. Biol. 12(9):3733-3742 (1992).

Images



Western blot analysis of BRAF (arrow) using rabbit polyclonal BRAF Antibody (S578) (RB10941). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the BRAF gene (Lane 2) (Origene Technologies).

Formalin-fixed and paraffin-embedded human brain tissue reacted with BRAF Antibody (S578), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.