10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-BRAF(T439) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3303a

Product Information

Application	DB, E
Primary Accession	P15056
Other Accession	Q04982
Reactivity	Human
Predicted	Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB10937
Calculated MW	84437

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 phosphopeptide corresponding to amino acid residues surrounding T439 of human BRAF.
Dilution	DB~~1:500 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	Phospho-BRAF(T439) 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.

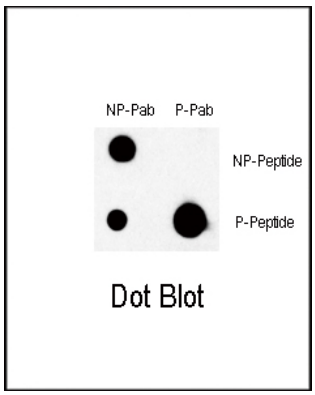
Background

BRAF 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 neuron. Defects in BRAF are a cause of cardiofaciocutaneous syndrome (CFC syndrome), also known as cardio-facio-cutaneous syndrome. CFC syndrome is characterized by a distinctive facial appearance, heart defects and mental retardation. Heart defects include pulmonic stenosis, atrial septal defects and hypertrophic cardiomyopathy. Some affected individuals present with ectodermal abnormalities such as sparse, friable hair, hyperkeratotic skin lesions and a generalized ichthyosis-like condition. Typical facial features are similar to Noonan syndrome. They include high forehead with bitemporal constriction, hypoplastic supraorbital ridges, downslanting palpebral fissures, a depressed nasal bridge, and posteriorly angulated ears with prominent helices. The inheritance of CFC syndrome is autosomal dominant.

References

Loewe, R., et al., J. Invest. Dermatol. 123(4):733-736 (2004).
Yamaguchi, T., et al., J. Biol. Chem. 279(39):40419-40430 (2004).
Frattini, M., et al., Oncogene 23(44):7436-7440 (2004).
Tsavachidou, D., et al., Cancer Res. 64(16):5556-5559 (2004).
Gear, H., et al., Invest. Ophthalmol. Vis. Sci. 45(8):2484-2488 (2004).

Images



Dot blot analysis of phospho-BRAF-T439 polyclonal antibody(Cat# AP3303a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentration was 0.5ug per ml. P-Pab: phospho-antibody; P-Peptide: phospho-peptide; NP-Peptide: non-phospho-peptide.

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