

B-RAF Antibody (S445)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7810f

Specification

B-RAF Antibody (S445) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	P15056
Other Accession	P28028 , Q04982
Reactivity	Human
Predicted	Chicken, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	424-453

B-RAF Antibody (S445) - 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 B-RAF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 424-453 amino acids from human B-RAF.

Dilution

IF~~1:25
WB~~1:2000
IHC-P~~1:10~50
FC~~1:25

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

B-RAF Antibody (S445) is for research use only and not for use in diagnostic or therapeutic procedures.

B-RAF Antibody (S445) - 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

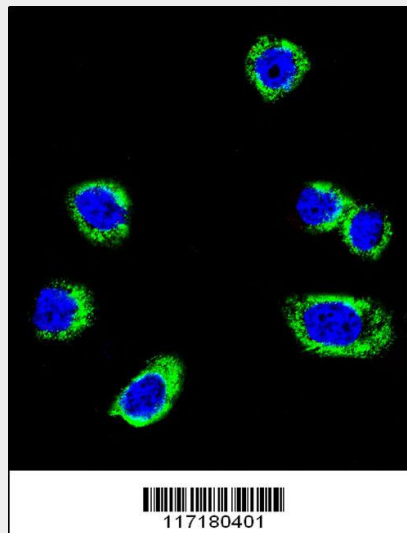
Brain and testis.

B-RAF Antibody (S445) - Protocols

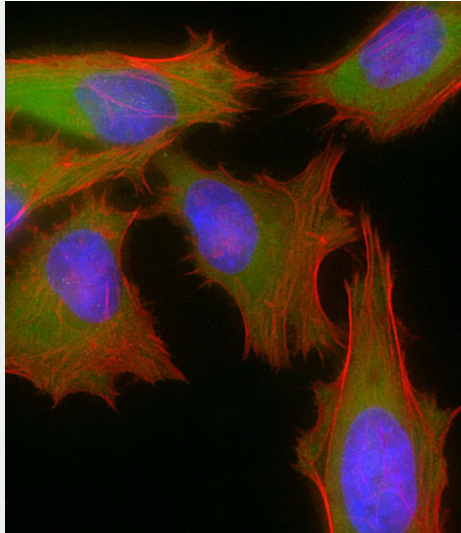
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

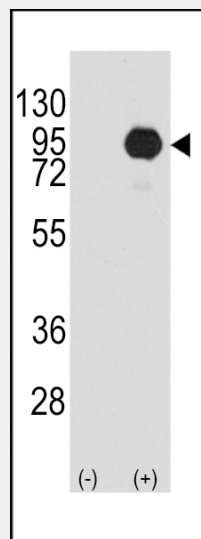
B-RAF Antibody (S445) - Images



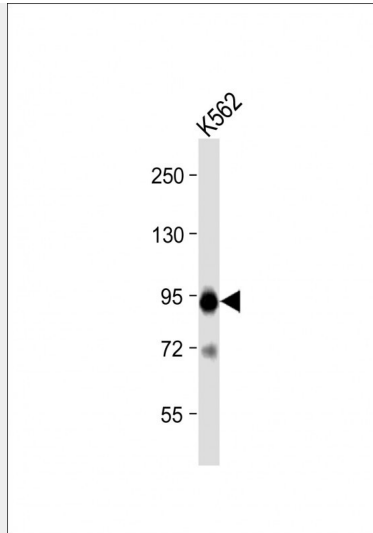
Confocal immunofluorescent analysis of B-RAF Antibody (S445)(Cat#AP7810f) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



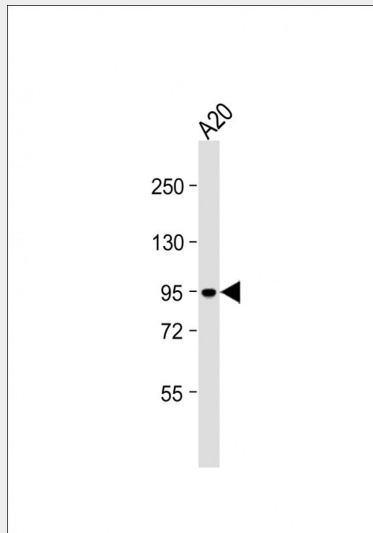
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling B-RAF with AP7810f at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and nucleus staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).



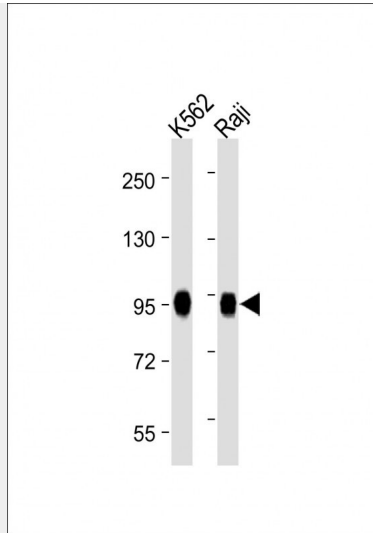
Western blot analysis of BRAF (arrow) using rabbit polyclonal BRAF Antibody (S445) (RB10940). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the BRAF gene (Lane 2) (Origene Technologies).



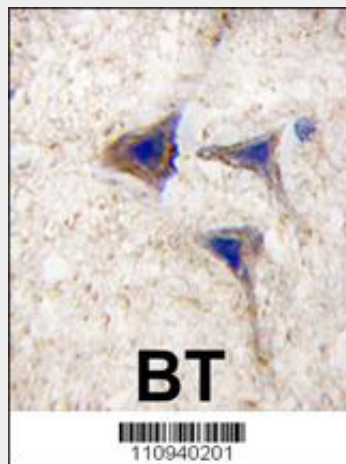
Anti-B-RAF Antibody (S445) at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



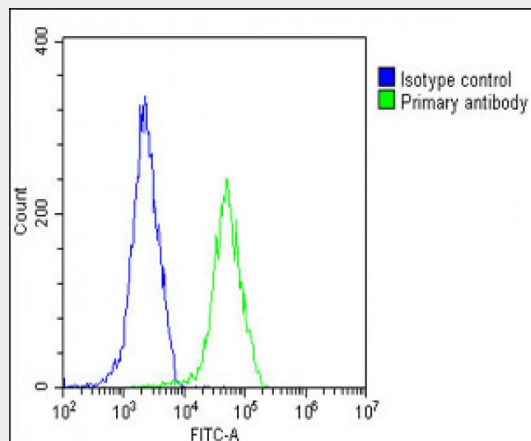
Anti-B-RAF Antibody (S445) at 1:2000 dilution + A20 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-B-RAF Antibody (S445) at 1:2000 dilution Lane 1: K562 whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with BRAF Antibody (S445), 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.



Overlay histogram showing HeLa cells stained with AP7810f (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7810f, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

B-RAF Antibody (S445) - 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.

B-RAF Antibody (S445) - 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).