

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

**Specification**

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**B-RAF Antibody (S445) - Product Information**

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">P15056</a>
Other Accession	<a href="#">P28028</a> , <a href="#">Q04982</a>
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~~1:1000  
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**

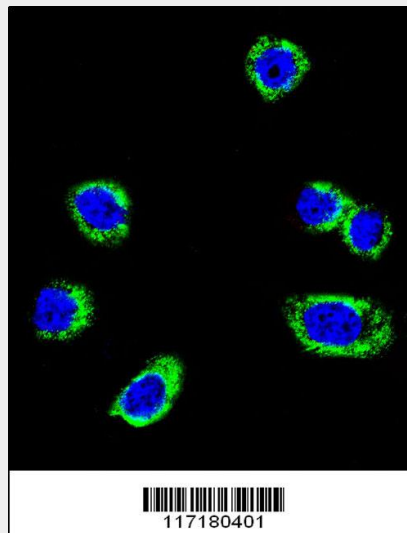
Brain and testis.

**B-RAF Antibody (S445) - Protocols**

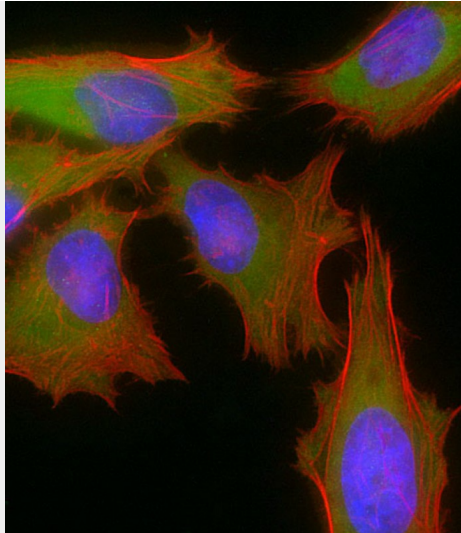
Provided below are standard protocols that you may find useful for product applications.

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

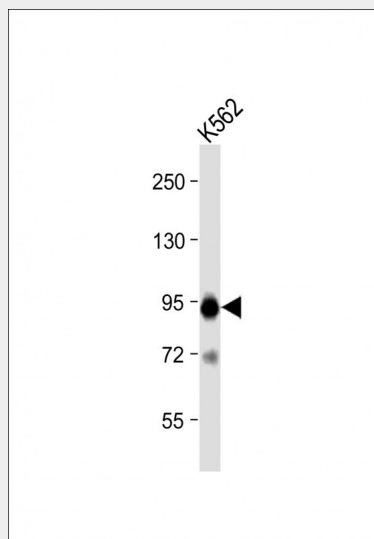
**B-RAF Antibody (S445) - Images**



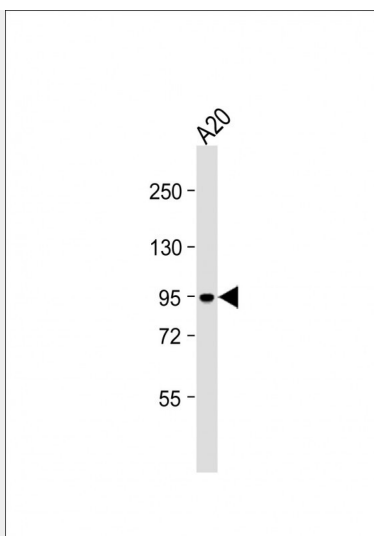
Confocal immunofluorescent analysis of B-RAF Antibody (S445)(Cat#AP7810f) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



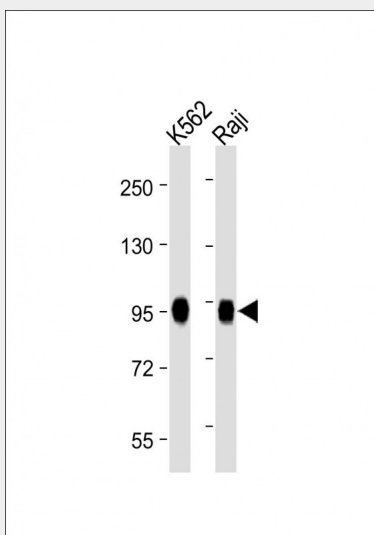
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling B-RAF with AP7810f at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (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).



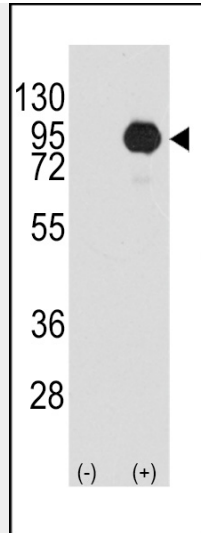
Anti-B-RAF Antibody (S445) at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



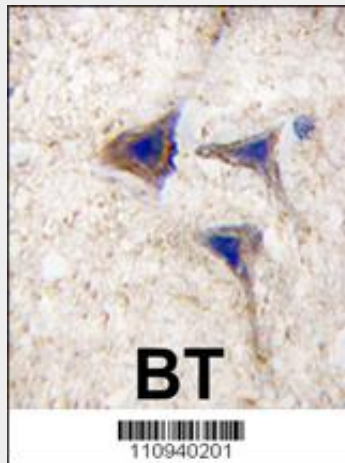
Anti-B-RAF Antibody (S445) at 1:2000 dilution + A20 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



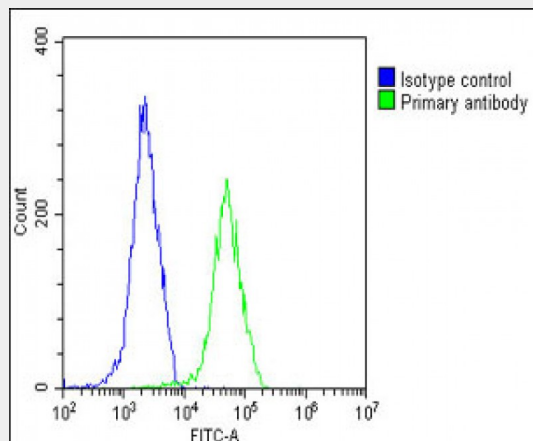
All lanes : Anti-B-RAF Antibody (S445) at 1:2000 dilution Lane 1: K562 whole cell lysate Lane 2: Raji whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5%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



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).



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 (1µg/1x10<sup>6</sup> 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).