

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to BRAF

Format: PURE RUO REF IQP-1269P Volume: 0.1ml



Description

| | |
|--------------------------|---|
| Clone | 1H12 |
| Isotype | Mouse IgG1 |
| Specificity | BRAF |
| Alternative names | BRAF1; RAFB1; B-RAF1; FLJ95109 |
| Species | Human, Mouse |
| Immunogen | Purified recombinant fragment of human BRAF expressed in E. Coli. |
| Mw | 87kDa |
| Format | Ascitic fluid containing 0.03% sodium azide. |

Summary

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 phosphorylation sites (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 highest levels 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.

Applications

Western Blotting: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications. Determine optimal working dilutions by titration test.

Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.



Handling and Storage

Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated

with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

Warranty Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization












To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning All products contain sodium azide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

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

| | |
|---|--|
|  | Consult instructions for use |
|  | Catalogue number |
|  | Sufficient for |
|  | Caution, consult accompanying document |
|  | Keep away from (sun)light |
|  | Biological risks |
|  | Temperature limitation (°C) |
|  | For Research Use Only |
|  | Batch code |
|  | Use by yyyy-mm-dd |
|  | Manufacturer |

| | | Label - tandem | Ex -max (nm) | Em -max (nm) |
|-----|-------------|-----------------------|---------------------|---------------------|
| P | PURE | purified material | - | - |
| F | FITC | FITC | 488 | 519 |
| R | R-PE | PE | 488, 532 | 578 |
| C | CyQ | PE-Cy5.18 | 488, 532 | 667 |
| A | APC | | 595, 633, 635, 647 | 660 |
| PC | PerCP | | 488, 532 | 678 |
| PCC | PerCP-Cy5.5 | | 488, 532 | 695 |



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