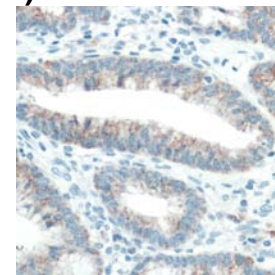




## Mouse Anti-Human BRAF V600E Monoclonal Antibody (Clone VE1)

- CATALOG #:**
- E19290** 0.1 ml mouse monoclonal antibody purified by protein A/G in Tris buffer pH 7.5 with 0.3% carrier protein and less than 0.1% sodium azide.
  - E19292** 0.5 ml mouse monoclonal antibody purified by protein A/G in Tris buffer pH 7.5 with 0.3% carrier protein and less than 0.1% sodium azide.
  - E19294** 1.0 ml mouse monoclonal antibody purified by protein A/G in Tris buffer pH 7.5 with 0.3% carrier protein and less than 0.1% sodium azide.



*Human colon carcinoma with V600E mutation stained with anti-BRAF V600E antibody*

- INTENDED USE:** For Research Use Only. Not for use in diagnostic procedures.
- CLONE:** VE1
- IMMUNOGEN:** Synthetic peptide representing the BRAF V600E mutated amino acid sequence from amino acid 596 to 606 (GLATEKSRWSG).
- IG ISOTYPE:** Mouse IgG2a
- EPITOPE:** Not determined
- MOLECULAR WEIGHT:** 95 kDa
- SPECIES REACTIVITY:** Human (tested). (See [www.springbio.com](http://www.springbio.com) for information on species reactivity predicted by sequence homology.)

**DESCRIPTION:** Serine/threonine-protein kinase B-raf (BRAF) is a member of the Raf family. BRAF mutations are frequent in benign and malignant human tumors. BRAF V600E mutation accounts for the vast majority of BRAF alterations and the mutation induces a conformational change of the activation segment leading to a constitutive kinase activity of BRAF and consecutive phosphorylation of downstream targets. BRAF V600E mutation have been detected in melanoma, papillary thyroid carcinoma, pleomorphic xanthoastrocytomas, Langerhans cell histiocytosis, borderline ovarian cancer, ganglioglioma, colorectal carcinoma, and pilocytic astrocytoma.

**APPLICATIONS:** Immunohistochemistry (IHC) and Western Blotting (recommended<sup>1</sup>, but not tested).

**IHC PROCEDURE:** **Specimen Preparation:** Formalin-fixed, paraffin-embedded tissues are suitable for use with this primary antibody.

Table 1: Recommended staining protocol for BRAF VE600E monoclonal antibody with ChromoMap DAB Detection Kit on a Ventana Discovery XT instrument.

Procedure Type	Method
Procedure	Res DISCOVERY HQ Amp XT
Deparaffinization	Selected, 72°C
Cell Conditioning	CC1 Standard
Antibody Titration	Selected (Standard Titration Ab inc)
Antibody Incubation	16min at 37°C (1:50 dilution*)
OMap anti-Ms HRP incubation	8min
DISC AMP TSA HQ incubation	16min
DISC anti-HQ HRP incubation	16min
Counterstain (Hematoxylin II)	4min
Post Counterstain(Bluing)	4min

\*Recommend diluting antibody in Antibody Diluent V (Catalog # ADV-060 or ADV-125)

**Visualization:** Detect the antibody as instructed by the instructions provided with the visualization system.

- IHC POSITIVE CONTROL:** Colon Carcinoma with BRAF V600E mutation
- CELLULAR LOCALIZATION:** Cytoplasm

**STORAGE & STABILITY:**

Store at 2-8°C. Do not freeze. The user must validate any other storage conditions. When properly stored, the reagent is stable to the date indicated on the label. Do not use the reagent beyond the expiration date.

There are no definitive signs to indicate instability of this product; therefore, positive and negative controls should be tested simultaneously with unknown specimens.

If unexpected results are observed which cannot be explained by variations in laboratory procedures and a problem with the reagent is suspected, contact Technical Support at tech@springbio.com.

**WARNINGS & PRECAUTIONS:**

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

**CUSTOMER NOTICE:**

In our experience the BRAF V600E (VE1) antibody is sensitive to pretreatment and deparaffinization protocol conditions. Spring has obtained optimal results using the prescribed protocol shown above for the Discovery XT IHC staining instrument. Spring has not optimized this antibody outside of the Discovery XT and use of this antibody with any other system or protocol may not deliver the desired results.

**Reference:**

1. Capper D, Preusser M, Habel A, Sahm F, Ackermann U, Schindler G, Pusch S, Mechtersheimer G, Zentgraf H, von Deimling A. Acta Neuropathol. Assessment of BRAF V600E mutation status by immunohistochemistry with a mutation-specific monoclonal antibody. 2011 Jul;122(1):11-9. Epub 2011 Jun 3.