PRODUCT INFORMATION



B-RAF Rabbit Monoclonal Antibody (Clone RM308)

Item No. 32251

Overview and Properties

Contents: Synonyms:	This vial contains 100 μl of protein A-affinity purified monoclonal antibody. B-RAF Proto-oncogene, Proto-oncogene B-RAF, RAFB1, Serine/Threonine Kinase, V-Raf Murine Sarcoma Viral Oncogene Homolog B
Immunogen:	Peptide corresponding to a region near the N-terminus of human B-RAF
Cross Reactivity:	(+) B-RAF
Species Reactivity	: (+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM308
Host:	Rabbit
Isotype:	lgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution for IHC is 1:200-1:500 and 1:100-1:200 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



WB of K562 cell lysates using B-RAF Rabbit Monoclonal Antibody (Clone RM308) at a 1:100 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human kidney tissue using B-RAF Rabbit Monoclonal Antibody (Clone RM308) at a 1:500 dilution.

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/30/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Rapidly accelerated fibrosarcoma (Raf) kinase is a serine/threonine kinase and component of the MAPK/ERK signaling pathway.^{1,2} Upon activation by upstream RAS signaling, Raf dimerizes and phosphorylates MEK1 leading to activation of transcription factors for cell growth, proliferation, and survival.² Raf exists as three isoforms, A-RAF, B-RAF, and C-RAF, that all consist of three conserved regions (CRs) with domain-specific functions.¹ CR1 contains a cysteine-rich domain and a RAS-binding domain, CR2 is essential for negative regulation through inhibition of phosphorylation sites, and CR3 is the kinase domain. B-RAF is the most prominent isoform, expressed in most tissues, and localized to the cytosol. Activating mutations in B-RAF have been found in various cancers, including melanoma and non-small cell lung cancer (NSCLC), as well as in patients with Langerhans cell histiocytosis.¹⁻³ Cayman's B-RAF Rabbit Monoclonal Antibody (Clone RM308) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

- 1. Chavda, J. and Bhatt, H. Systemic review on B-Raf^{V600E} mutation as potential therapeutic target for the treatment of cancer. *Eur. J. Med. Chem.* **206**, 112675 (2020).
- Frisone, D., Friedlaender, A., Malapelle, U., et al. A BRAF new world. Crit. Rev. Oncol. Hematol. 152, 103008 (2020).
- 3. Satoh, T., Smith, A., Sarde, A., et al. B-RAF mutant alleles associated with Langerhans cell histiocytosis, a granulomatous pediatric disease. PLoS One 7(4), e33891 (2012).

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM