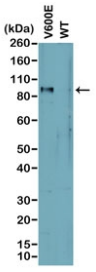
BRAF V600E Antibody RM8 / BRAF V600E Mutation Antibody [clone RM8] (R20306)

Catalog No.	Formulation	Size
R20306-50UG	1 mg/ml in PBS with 50% Glycerol, 1% BSA and 0.09% sodium azide	50 ug
R20306-100UG	1 mg/ml in PBS with 50% Glycerol, 1% BSA and 0.09% sodium azide	100 ug

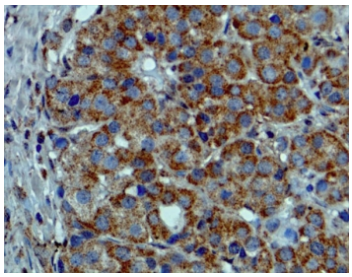
Recombinant RABBIT MONOCLONAL

Bulk quote request

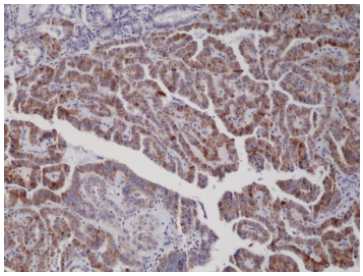
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM8
Purity	Protein A purified from animal origin-free supernatant
UniProt	P15056
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE): 0.5-5 ug/ml Immunocytochemistry: 2-10 ug/ml Western Blot: 0.5-2 ug/ml
Limitations	This BRAF V600E Antibody RM8 / BRAF V600E Mutation Antibody is available for research use only.



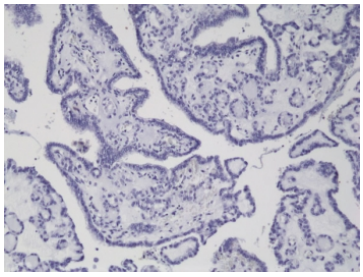
BRAF V600E Antibody RM8 Detection of Mutant and Wild-Type BRAF WB. Western blot analysis of cell lysates expressing endogenous BRAF V600E or wild-type BRAF using BRAF V600E Antibody clone RM8. A distinct band is detected at approximately 85 kDa in the V600E sample, while no corresponding signal is evident in the wild-type sample, supporting mutation-specific recognition of BRAF V600E.



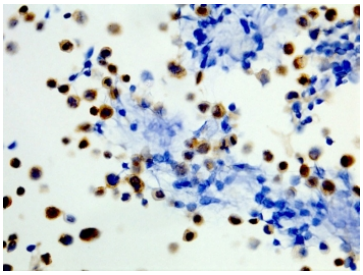
BRAF V600E Antibody RM8 Staining of Human Melanoma IHC. Immunohistochemistry staining of FFPE human melanoma tissue using BRAF V600E Antibody clone RM8. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min followed by cooling. Strong brown immunoreactivity is visible throughout the tumor-cell population, with predominantly cytoplasmic staining.



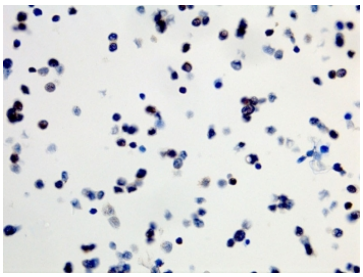
BRAF V600E Antibody RM8 Staining of V600E-Positive Thyroid Carcinoma IHC. Immunohistochemistry staining of FFPE human thyroid carcinoma confirmed positive for the BRAF V600E mutation by allele-specific PCR using BRAF V600E Antibody clone RM8. Heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min followed by cooling. Strong, widespread brown immunoreactivity is evident within the carcinoma, consistent with detection of mutant BRAF V600E protein.



BRAF V600E Antibody RM8 Testing of V600E-Negative Thyroid Carcinoma IHC. Immunohistochemistry staining of FFPE human thyroid carcinoma confirmed negative for the BRAF V600E mutation by allele-specific PCR using BRAF V600E Antibody clone RM8. Following heat-induced epitope retrieval in pH 6 citrate buffer, the tissue shows little to no specific brown staining, supporting discrimination between V600E-positive and V600E-negative thyroid carcinoma.



BRAF V600E Antibody RM8 Staining of V600E-Positive WiDr Colon Cancer Cells ICC. Immunocytochemistry staining of FFPE human WiDr colorectal adenocarcinoma cells using BRAF V600E Antibody clone RM8. Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min followed by cooling. Strong brown immunoreactivity is evident in the positive cell population, demonstrating detection of BRAF V600E under the tested conditions.



BRAF V600E Antibody RM8 Testing of V600E-Negative SW40 Cells ICC. Immunocytochemistry staining of FFPE human SW40 cells using BRAF V600E Antibody clone RM8. Heat-induced epitope retrieval was performed by steaming in pH 6 citrate buffer for 20 min followed by cooling. Little to no specific brown staining is evident in this negative cell sample, providing a contrasting control for the BRAF V600E-positive WiDr cells.

Description

BRAF V600E Antibody RM8 / BRAF V600E Mutation Antibody specifically detects the BRAF V600E mutant protein. BRAF is a serine/threonine kinase in the RAS-RAF-MEK-ERK signaling pathway, which regulates cell proliferation, differentiation and survival. The V600E mutation substitutes glutamic acid for valine at amino acid 600 within the BRAF kinase domain, producing constitutive kinase activation and sustained downstream MAPK signaling.

BRAF V600E is one of the most extensively studied oncogenic kinase mutations. It occurs frequently in melanoma and papillary thyroid carcinoma and is also found in subsets of colorectal cancer, non-small cell lung cancer, gliomas and hematologic malignancies. The mutation is particularly characteristic of classical hairy cell leukemia, where detection of

mutant BRAF has become an important molecular marker for investigating disease biology.

A BRAF V600E Mutation Antibody enables protein-level detection of the mutant form rather than measurement of total BRAF expression. Mutation-specific antibody recognition can complement molecular approaches used to characterize BRAF status and is valuable for research examining the distribution and cellular localization of BRAF V600E protein within experimental samples. Because wild-type BRAF remains present in many biological contexts, discrimination between mutant and wild-type protein is an important feature of V600E-specific reagents.

Clone RM8 is a recombinant rabbit monoclonal antibody generated against a peptide corresponding to the BRAF V600E mutant sequence. The antibody recognizes mutant BRAF V600E without detectable cross-reactivity with wild-type BRAF under the tested conditions. Its mutation-specific recognition makes clone RM8 particularly useful for research into oncogenic MAPK signaling and BRAF V600E-associated tumor biology.

Researchers requiring detection of BRAF independent of V600E mutation status can see our BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody page. NSJ Bioreagents provides antibodies for research into BRAF and RAF-MAPK pathway signaling. A BRAF V600E Antibody provides a research tool for specifically detecting mutant BRAF V600E and investigating its role in oncogenic signaling and cancer biology.

Researchers requiring detection of BRAF independent of V600E mutation status can see our BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the BRAF V600E Antibody RM8 / BRAF V600E Mutation Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to BRAF V600E mutant was used as the immunogen for the recombinant BRAF V600E Antibody RM8.

Storage

Store the BRAF V600E Antibody RM8 at -20oC.

Alternate Names

BRAF V600E mutation antibody, BRAF V600E mutant antibody, B-Raf V600E antibody, BRAF Val600Glu antibody, B-Raf Val600Glu antibody

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