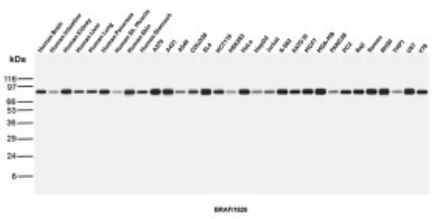
BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody [clone BRAF/1626] (V4594)

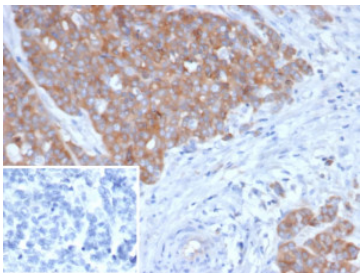
Catalog No.	Formulation	Size
V4594-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4594-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4594SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

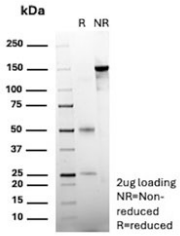
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	BRAF/1626
Purity	Protein A/G affinity
UniProt	Q9P0W2
Localization	Nucleus, Cytoplasm, Cell membrane
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody is available for research use only.



BRAF Antibody BRAF/1626 Detection Across Human Tissues and Cancer Cell Lines WB. Western blot analysis of human brain, intestine, kidney, lung, liver, pancreas, skeletal muscle, skin and stomach tissue lysates, and A375, A431, A549, COLO38, EL4, HCT116, HEK293, HeLa, HepG2, Jurkat, K-562, KATO III, MCF-7, MDA-MB-231, PANC28, PC-3, Raji, Ramos, RH30, THP-1, U87 and Y79 cell lysates using BRAF Antibody clone BRAF/1626. A prominent band is detected at approximately 80-85 kDa across the tested samples, consistent with the expected molecular weight of B-Raf kinase.



BRAF Antibody BRAF/1626 Staining of Human Ovarian Cancer IHC. Immunohistochemistry staining of FFPE human ovarian cancer tissue using BRAF Antibody clone BRAF/1626. Heat-induced epitope retrieval was performed by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before staining. The inset shows the secondary antibody negative control, with PBS substituted for the primary antibody.



Purified BRAF Antibody BRAF/1626 SDS-PAGE. SDS-PAGE analysis of purified, BSA-free BRAF Antibody clone BRAF/1626 under reduced (R) and non-reduced (NR) conditions with 2 ug loaded per lane. Under reducing conditions, bands corresponding to the immunoglobulin heavy and light chains are visible at approximately 50 kDa and 25 kDa, respectively. The non-reduced antibody migrates predominantly near 150 kDa, consistent with intact IgG and supporting the integrity and purity of the purified monoclonal antibody preparation.

Description

BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody detects BRAF, a member of the RAF family of serine/threonine protein kinases and a central component of the RAS-RAF-MEK-ERK signaling pathway. BRAF functions downstream of activated RAS proteins and transmits extracellular growth signals through phosphorylation and activation of MEK proteins, which subsequently activate ERK. This signaling cascade regulates processes including cell proliferation, differentiation, survival and development.

BRAF contains regulatory regions that control kinase activation and a C-terminal serine/threonine kinase domain responsible for downstream signaling. Under normal conditions, BRAF activity is tightly regulated in response to upstream signals. Activating alterations can disrupt this control and produce sustained MAPK pathway signaling, allowing BRAF to function as an important oncogenic driver. These properties make a B-Raf Kinase Antibody useful for investigating MAPK pathway biology and mechanisms controlling cellular growth and differentiation.

BRAF mutations are particularly important in cancer research. The best-known alteration is BRAF V600E, in which substitution of valine by glutamic acid at amino acid 600 promotes constitutive kinase activity. BRAF alterations occur in melanoma and are also found in colorectal, thyroid, lung, hematologic and other malignancies. The importance of mutant BRAF as a driver of MAPK signaling has also made the protein a major focus of targeted therapy and mechanisms of therapeutic resistance.

BRAF biology extends beyond oncogenic signaling. Normal RAF-MAPK activity participates in developmental processes and cellular responses to extracellular signals, while germline alterations affecting BRAF and related pathway components are associated with developmental disorders. Studying BRAF can therefore provide insight into both physiological signal transduction and diseases resulting from abnormal regulation of the RAS-RAF-MEK-ERK pathway.

Clone BRAF/1626 is a mouse monoclonal antibody directed against human BRAF. Researchers investigating BRAF signaling and related kinase pathways can explore additional targets on our Signal Transduction Antibodies page. NSJ Bioreagents provides antibodies for research into proteins regulating intracellular signaling and cellular responses. A BRAF Antibody provides a research tool for investigating B-Raf expression and its roles in MAPK signaling, cellular growth, development and cancer biology.

Researchers investigating BRAF signaling and related kinase pathways can explore additional targets on our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the BRAF Antibody BRAF/1626 / B-Raf Kinase Antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human HMG20B/BRAF protein was used as the immunogen for the BRAF antibody.

Storage

Aliquot the BRAF antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

B-Raf antibody, BRAF1 antibody, B-RAF1 antibody, RAFB1 antibody, Serine/threonine-protein kinase B-Raf antibody, Proto-oncogene B-Raf antibody

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