



Mouse Anti-Human BRAF V600E monoclonal antibody, clone JID711 (CABT-L2810)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
Specificity	Human BRAF V600E
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Clone	JID711
Conjugate	Unconjugated
Applications	IHC
Reconstitution	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
Positive Control	Colorectal Adenocarcinoma, Thyroid Papillary Carcinoma with the BRAF V600E Mutation
Format	Liquid
Size	100 µg
Buffer	Predilute: Antibody Diluent Buffer

Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

Preservative	< 0.1% Sodium Azide
Storage	Store at 2-8°C. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	Serine/threonine-protein kinase B-Raf (BRAF) is a cytoplasmic serine-threonine kinase of the RAF family which mediates downstream cellular responses to growth signals through the mitogen-activated protein kinase (MAPK) signaling pathway. Oncogenic mutations in the BRAF gene, 80% of which are a single V600E substitution within the kinase domain, constitutively activate the MAPK signaling pathway and result in increased cell proliferation and apoptosis resistance. The V600E mutation is observed in colorectal cancer, non-Hodgkin lymphoma, papillary thyroid carcinoma, malignant melanoma, non-small-cell lung carcinoma, and lung adenocarcinoma. BRAF V600E is therefore an important immunohistochemical marker for tumor diagnosis and prognosis.
Keywords	BRAF;v-raf murine sarcoma viral oncogene homolog B;NS7;BRAF1;RAFB1;B-RAF1;serine/threonine-protein kinase B-raf;94 kDa B-raf protein;proto-oncogene B-Raf;v-raf murine sarcoma viral oncogene homolog B1

GENE INFORMATION

Gene Name	BRAF B-Raf proto-oncogene, serine/threonine kinase [Homo sapiens (human)]
Official Symbol	BRAF
Synonyms	BRAF; B-Raf proto-oncogene, serine/threonine kinase; NS7; BRAF1; RAFB1; B-RAF1; serine/threonine-protein kinase B-raf; 94 kDa B-raf protein; proto-oncogene B-Raf; v-raf murine sarcoma viral oncogene homolog B; v-raf murine sarcoma viral oncogene homolog B1; murine sarcoma viral (v-raf) oncogene homolog B1; B-Raf proto-oncogene serine/threonine-protein kinase (p94);
Entrez Gene ID	673
Protein Refseq	NP_004324
UniProt ID	P15056
Chromosome Location	7q34
Pathway	ARMS-mediated activation; Activation of NMDA receptor upon glutamate binding and

postsynaptic events; Acute myeloid leukemia; Alcoholism; B Cell Receptor Signaling Pathway; Bladder cancer; CDC42 signaling events; CREB phosphorylation through the activation of Ras;

Function

ATP binding; MAP kinase kinase kinase activity; calcium ion binding; identical protein binding; mitogen-activated protein kinase kinase binding; protein binding; protein heterodimerization activity; protein kinase activity; protein serine/threonine kinase activity; NOT small GTPase binding;
