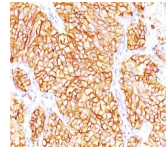


Renal Cell Carcinoma (Carbonic Anhydrase IX) Monoclonal Mouse Antibody (66.4.C2)



Product Description

Carbonic anhydrase IX (carbonic anhydrase 9) is one of several carbolic anhydrases that vary in tissue distribution and localization. Carbonic anhydrases catalyze the interconversion of carbon dioxide and water into carbonic acid and bicarbonate and are found in all mammalian tissues. Carbonic anhydrase IX is a transmembrane protein that is not expressed in most healthy tissues, but is expressed in most renal cell carcinomas.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#0287
Antibody reactivity (target)	Carbonic Anhydrase IX
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	66.4.C2
Isotype	IgG2b, kappa
Molecular weight	55 kDa
Synonyms	Carbonic anhydrase IX; Carbonic anhydrase 9; RCC-associated antigen G250; Carbonic dehydratase, CA-IX; Membrane antigen MN
Human gene symbol	CA9
Entrez gene ID	768
SwissProt	Q16790
Unigene	63287
Immunogen	Microsomal fraction of human renal cortical tissue homogenate
Antibody target cellular	Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Horse, Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	Normal kidney or renal cell carcinoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Metabolism
Cell/tissue expression	Kidney
Tumor expression	Renal cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, of LI-COR Bioscience.