

Mouse Carbonic Anhydrase VIII Monoclonal Antibody | anti-CA8 antibody

Carbonic Anhydrase VIII

CATALOG # AAA214836	HOST Mouse	REACTIVITY Human. Others not tested.	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

Carbonic Anhydrase VIII; Monoclonal Antibody; CA-VIII; CALS; CARP; MGC120502; MGC99509; anti-CA8 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not tested.
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	CPTC-CA8-2
Specificity	The protein encoded by this gene was initially named CA-related protein because of sequence similarity to other known carbonic anhydrase genes. However, the gene product lacks carbonic anhydrase activity (i.e., the reversible hydration of carbon dioxide). The gene product continues to carry a carbonic anhydrase designation based on clear sequence identity to other members of the carbonic anhydrase gene family. The absence of CA8 gene transcription in the cerebellum of the lurcher mutant in mice with a neurologic defect suggests an important role for this acatalytic form. Mutations in CA8 (carbonic anhydrase 8) gene causes neuropathology, such as ataxia, mild mental retardation and the predisposition to quadrupedal gait. It is also associated with the development of colorectal and lung cancers. Additionally, it is upregulated in various cancers.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	290
Applicable Applications for anti-CA8 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant human full-length CA8 protein
Positive Control	Human cerebellum. Selective expression in purkinje Cells. HEK-293 and K-562 cell lines.
Cellular Localization	Cytoplasm, membrane.
Chromosome Location	8q12.1
Preparation and Storage	Antibody with azide - store at 2 to 8 degree C. Antibody without azide - store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Cereblumstained with CA8 Mouse Monoclonal Antibody (CPTC-CA8-2).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Cereblumstained with CA8 Mouse Monoclonal Antibody (CPTC-CA8-2).

ADDITIONAL INFORMATION

References	Shimobayashi, E, et al. Molecular Neurobiology., U.S. National Library of Medicine, Oct. 201
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NCBI AND UNIPROT INFORMATION

NCBI GI #	1012443759
NCBI GeneID	767
NCBI Accession #	NP_001308766.1
NCBI GenBank Nucleotide #	NM_001321837.1
UniProt Accession #	P35219; Q32MY2; A8K0A5; B3KQZ7
Molecular Weight	32.97kDa
NCBI Official Full Name	carbonic anhydrase-related protein isoform a
NCBI Official Synonym Full Names	carbonic anhydrase 8
NCBI Official Symbol	CA8
NCBI Official Synonym Symbols	CALS; CARP; CA-RP; CAMRQ3; CA-VIII
NCBI Protein Information	carbonic anhydrase-related protein
UniProt Protein Name	Carbonic anhydrase-related protein
UniProt Gene Name	CA8
UniProt Synonym Gene Names	CALS; CARP; CA-VIII

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.