

## Carbonic Anhydrase VIII Antibody

Mouse Monoclonal Antibody [Clone CPTC-CA8-2]

Catalog No	Format	Size
767-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
767-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
767-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

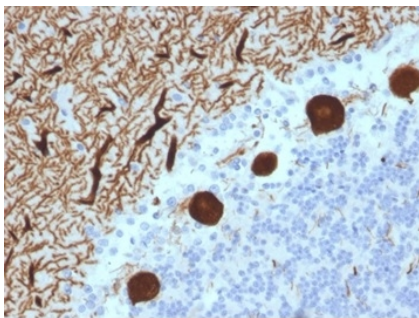
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

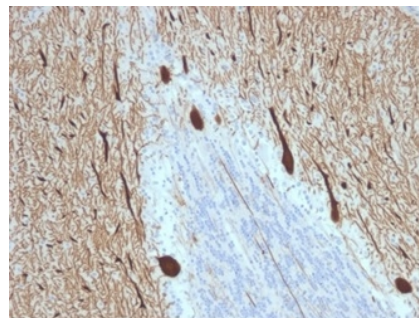
<b>Clone</b>	CPTC-CA8-2
<b>Gene Name</b>	CA8
<b>Immunogen</b>	Recombinant full-length human CA8 protein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2a / Kappa
<b>Mol. Weight of Antigen</b>	32.97kDa
<b>Cellular Localization</b>	Cytoplasm
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Human cerebellum. Selective expression in Purkinje cells. HEK293 or K-562 cell lines.

*\*Optimal dilution for a specific application should be determined.*

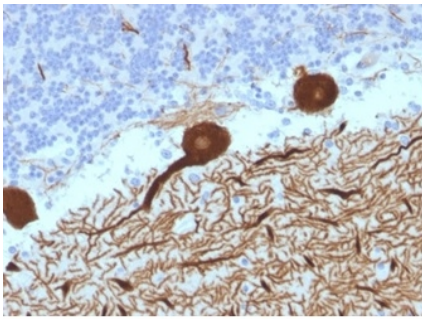
### Product Images for Carbonic Anhydrase VIII Antibody



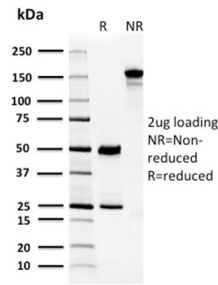
Formalin-fixed, paraffin-embedded human cerebellum stained with Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.



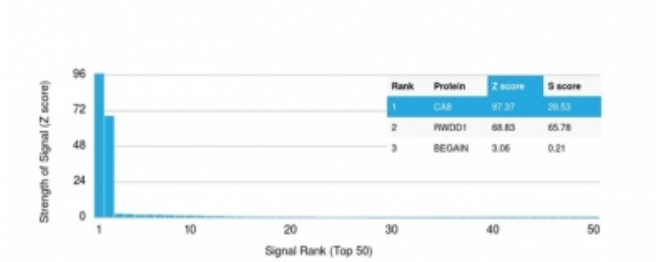
Formalin-fixed, paraffin-embedded human cerebellum stained with Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.



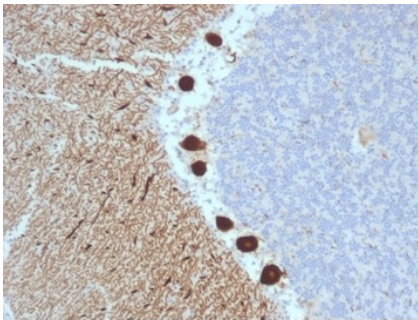
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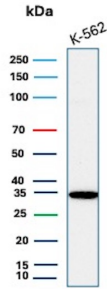
SDS-PAGE Analysis of Purified Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2). Confirmation of Purity and Integrity of Antibody



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.



Formalin-fixed, paraffin-embedded human cerebellum stained with Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2). HIER: Tris/EDTA, pH9.0, 45min. 2°: HRP-polymer, 30min. DAB, 5min.



Western blot analysis of K-562 cell lysate using Carbonic Anhydrase VIII Mouse Monoclonal Antibody (CPTC-CA8-2).

### **Specificity & Comments**

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 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.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

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.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

Neuroscience

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