

Carbonic Anhydrase VIII Antibody / CA8 [clone CA8/6814] (V5244)

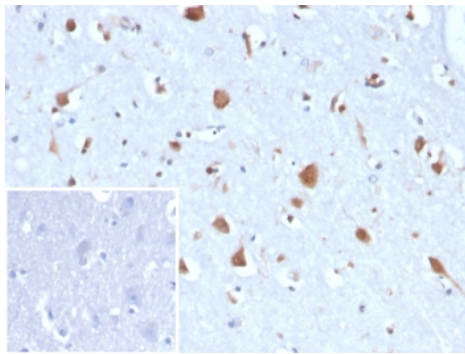
Catalog No.	Formulation	Size
V5244-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5244-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5244SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

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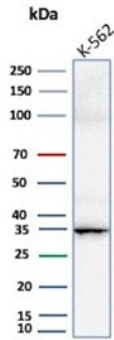
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CA8/6814
Purity	Protein A/G affinity
UniProt	P35219
Localization	Cytoplasm, Cell surface
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western blot : 2-4ug/ml
Limitations	This Carbonic Anhydrase VIII antibody is available for research use only.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Carbonic Anhydrase VIII antibody (clone CA8/6814). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) 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(TM) 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 staining of FFPE human brain tissue with Carbonic Anhydrase VIII antibody (clone CA8/6814). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human K562 cell lysate with Carbonic Anhydrase VIII antibody.

Description

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.

Application Notes

Optimal dilution of the Carbonic Anhydrase VIII antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the Carbonic Anhydrase VIII antibody.

Storage

Aliquot the Carbonic Anhydrase VIII antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.