

DESCRIPTION

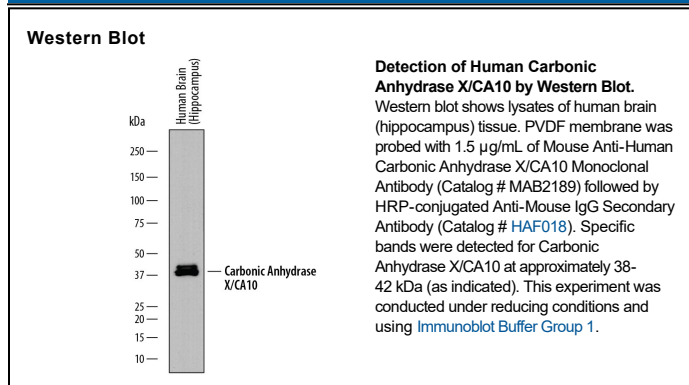
Species Reactivity	Human
Specificity	Detects human Carbonic Anhydrase X/CA10 in ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 862319
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carbonic Anhydrase X/CA10 Met1-Asn300 Accession # Q9NS85
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CA10 (Carbonic Anhydrase-related X), also called CARP X and Cerebral protein 15, is a cytosolic 35 kDa (predicted) member of the α-carbonic anhydrase family of molecules. Although it does not possess CA enzymatic activity due to the lack of Zn and His in its (potential) catalytic site, the recombinant protein used as an immunogen does show esterase activity. CA10 is found principally in CNS neurons and respiratory epithelium. Human CA10 is 328 amino acids (aa) in length. It possesses one carbonic anhydrase domain that contains a utilized phosphorylation site at Thr299. One potential isoform is reported that shows a 22 aa substitution from aa 277-328. Human and mouse CA10 are identical in amino acid sequence.