

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carbonic Anhydrase VI in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Carbonic Anhydrase 2, 3, 4, 5A, 5B, 7, 8, 9, recombinant mouse Carbonic Anhydrase 12, and 14 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 401819
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carbonic Anhydrase VI Gln18-Asn308 Accession # EAW71606
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Carbonic Anhydrase catalyzes the reversible reaction of $\text{CO}_2 + \text{H}_2\text{O} = \text{HCO}_3^- + \text{H}^+$, which is fundamental to many processes such as respiration, renal tubular acidification and bone resorption (1). Carbonic Anhydrase VI, also known as gustin and salivary Carbonic Anhydrase, is a zinc-metalloprotein that constitutes about 3% of human parotid saliva protein (2, 3). It was decreased in patients with loss of taste and pathological changes in taste buds (4). It is also an elementary component of milk. It plays an important role in normal growth and development of the infant alimentary tract (5). Mature human CA6 shares 66% and 50% amino acid sequence identity with bovine and mouse CA6, respectively.

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