

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Carbonic Anhydrase VIII/CA8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human CA1, 2, 3, 4, 9, 10, 12, 13, or 14 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 308320
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Carbonic Anhydrase VIII/CA8 Ala2-Gln290 Accession # P35219
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

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 VIII (CA8), also called CA-related protein (CARP), is a cytosolic protein without CA activity (i.e., the reversible hydration of CO₂) due to point mutations in the zinc-binding site (1, 2). Nevertheless, it has esterase activity. CA8 is expressed exclusively in Purkinje cells of the cerebellum, where it binds inositol 1,4,5-triphosphate receptor type 1 (3). CA8 overexpression in human colorectal cancer and non-small cell lung cancer indicates that it plays a role in the process of invasion in these types of malignancy (4, 5). The 289 amino acid rhCA8 has a predicted molecular mass of approximately 33 kDa. It shares 98% amino acid identity with mouse, rat and bovine CA8 and 78% with Xenopus.

PRODUCT SPECIFIC NOTICES

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