



Recombinant Protein Technical Manual

**Recombinant Human Carbonic Anhydrase 8/CA8
Protein (His Tag)(Active)**
RPES2903

Product Data:

Product SKU: RPES2903

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_004047.3

Protein Information:

Molecular Mass: 33.8 kDa

AP Molecular Mass: 37 kDa

Tag: C-His

Bio-activity: Measured by its esterase activity. The specific activity is >100 pmoles/min/µg.

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 15% glycerol, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Carbonic Anhydrase-Related Protein; CARP; Carbonic Anhydrase VIII; CA-VIII; CA8; CALS;CAMRQ3;MGC120502;MGC99509

Immunogen Information:

Sequence: Met 1-Gln 290

Background:

The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrase (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. Carbonic anhydrase protein (CA) VIII, which is a member of the CA gene family, has been shown to have no catalytic CA activity and its biological function is still unknown. Increased expression of CA-RP VIII was observed in 78% of colorectal carcinomas. It suggested that CA-RP VIII plays a role in the process of invasion in colorectal cancer.