



Recombinant Protein Technical Manual  
Recombinant Mouse Carbonic Anhydrase VIII/CA8  
Protein (His Tag)(Active)  
RPES1764

#### Product Data:

**Product SKU:** RPES1764

**Size:** 20µg

**Species:** Mouse

**Expression host:** E. coli

**Uniprot:** P28651

#### Protein Information:

**Molecular Mass:** 34.5 kDa

**AP Molecular Mass:** 37 kDa

**Tag:** C-His

**Bio-activity:** Measured by its esterase activity. The specific activity is >5 pmoles/min/µg.

**Purity:** > 88 % as determined by 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 50mM Tris, pH 8.0

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

**Application:**

**Synonyms:** AW546993;Ca8;Cals;Cals1;Car8;Carp;RP2380H12.1;wdl

## Immunogen Information:

**Sequence:** Met 1-Gln 291

## 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.