



# Recombinant Protein Technical Manual

## Recombinant Mouse Carbonic Anhydrase 4/CA4 Protein (aa 17-420, His Tag)

RPES5071

### Product Data:

**Product SKU:** RPES5071

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** Q6P8K8

### Protein Information:

**Molecular Mass:** 46.7 kDa

**AP Molecular Mass:** 50 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 10% Glycerol, pH8.0.

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

**Application:**

**Synonyms:** CA4;CAIV;CA-IV;Car4;Carbonate dehydratase IV;carbonic anhydrase 4;carbonic anhydrase IVRP17;carbonic dehydratase IV;EC4.2.1.1;retinitis pigmentosa 17;RP17

## Immunogen Information:

**Sequence:** Gly17-Tyr420

## Background:

Carboxypeptidase A4 (CPA4) is a member of the peptidase M14 family. CPA4 is metalloprotease that could be involved in the histone hyperacetylation pathway. CPA4 binds one zinc ion per subunit and could catalyze to release of a C-terminal amino acid, with preference for -Phe, -Leu, -Ile, -Met, -Tyr and -Val. They have distinct expression patterns and different specificities for example, preferentially cleaving aromatic (carboxypeptidase As) or basic (carboxypeptidase Bs) residues. Several, such as carboxypeptidase Xs, have lost their catalytic activity. Carboxypeptidases play important roles in digestion of food, processing of bioactive peptides and blood coagulation.