



Recombinant Protein Technical Manual
Recombinant Mouse Carbonic Anhydrase X/CA10
Protein (His Tag)(Active)
RPES1744

Product Data:

Product SKU: RPES1744

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: P61215

Protein Information:

Molecular Mass: 33.1 kDa

AP Molecular Mass: 38 kDa

Tag: C-His

Bio-activity: Measured by its esterase activity. The specific activity is >10 pmoles/min/µg.

Purity: > 97 % as determined by SDS-PAGE

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

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 25mM Tris, 150mM NaCl, pH 7.4

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

Application:

Synonyms: 2700029L05Rik;BB085816;Ca10;Car10;RP23-448I9.1

Immunogen Information:

Sequence: Met 1-Asn 300

Background:

Carbonic anhydrase X, also called carbonic anhydrase - related protein X (CARPX) and CA10, belongs to the CA family of zinc metalloenzymes which catalyze the reversible hydration of carbon dioxide in various biological processes such as respiration, renal tubular acidification and bone resorption. The secreted protein CARPX without CA activity (hydration of CO₂) is identified as an acatalytic member of the alpha-carbonic anhydrase subgroup. CARP X expression is detected in the adult total brain and almost all parts of the central nervous system, but not in the fetal brain. Accordingly, CARP X is suggested to play a role in the development of central nervous system, especially the brain. The same CARP X protein are encoded by multiple transcript variants of this gene.