

## Recombinant Mouse Carbonic Anhydrase X/CA10 Protein (His Tag)

**Catalog Number:** PKSM040494

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

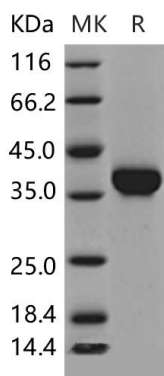
### Description

|                      |                                                                                                    |
|----------------------|----------------------------------------------------------------------------------------------------|
| <b>Species</b>       | Mouse                                                                                              |
| <b>Source</b>        | HEK293 Cells-derived Mouse Carbonic Anhydrase X/CA10 protein Met 1-Asn 300, with an C-terminal His |
| <b>Calculated MW</b> | 33.1 kDa                                                                                           |
| <b>Observed MW</b>   | 38 kDa                                                                                             |
| <b>Accession</b>     | P61215                                                                                             |
| <b>Bio-activity</b>  | Measured by its esterase activity. The specific activity is > 10 pmoles/min/μg.                    |

### Properties

|                       |                                                                                                                                                                                                                                             |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>         | > 97 % as determined by reducing SDS-PAGE.                                                                                                                                                                                                  |
| <b>Endotoxin</b>      | < 1.0 EU per μg of the protein as determined by the LAL method.                                                                                                                                                                             |
| <b>Storage</b>        | Generally, 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.       |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                             |
| <b>Formulation</b>    | Lyophilized from sterile 25mM Tris, 150mM NaCl, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.                                                                                                                                                                                |

### Data



> 97 % as determined by reducing SDS-PAGE.

### 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 CO<sub>2</sub>) 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.

### For Research Use Only

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