

Recombinant Mouse Carbonic Anhydrase XII/CA12 Protein (His Tag)

Catalog No. PKSM040971

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

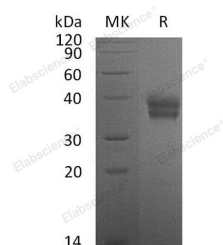
Description

Synonyms	Carbonic anhydrase 12;Carbonate dehydratase XII;Carbonic anhydrase XII;CA-XII;CA12;Carbonate dehydratase XII;CAXII;Car12
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Ala25-Ser301
Accession	Q8CI85
Calculated Molecular Weight	32.4 kDa
Observed molecular weight	35-40 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Carbonic Anhydrase (CA) XII, also known as Car12 and CA12, is an extracellular enzyme involved in the regulation of the microenvironment acidity and tumor malignant phenotype, was originally identified as a protein overexpressed in some types of cancers. It has showed that CA XII is induced by hypoxia and oestrogen and expressed at high levels on various types of cancer. The enzyme is directly involved in tumour progression, and its inhibition has an anti-tumour effect. Apart from its role in carcinogenesis, the enzyme contributes to various other diseases like glaucoma and arteriosclerotic plaques, among others. CA XII is therefore regarded as promising target for specific therapies, and may be used as a novel prognostic marker in combination with histologic grade of the tumors.