

Recombinant Mouse Carbonic Anhydrase 14/Car14 Protein (His Tag)

Catalog Number: PKSM040970

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

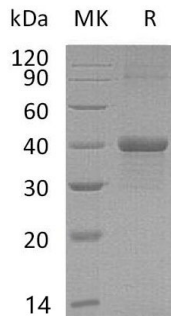
Description

Species	Mouse
Source	E.coli-derived Mouse Carbonic Anhydrase 14; Car14 protein Ala16-Met290, with an N-terminal His
Calculated MW	32.3 kDa
Observed MW	40 kDa
Accession	Q9WVT6
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein 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 Tris-HCl, 150mM NaCl, pH 8.0.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Mouse Ca14, also known as Carbonic anhydrase 14, is a member of large family of zinc metalloenzymes. It could catalyze reversible hydration of carbon dioxide. The reaction is fundamental to many processes such as respiration, renal tubular acidification and bone resorption. Fifteen CA isoforms have been reported so far. They have different patterns of tissue-specific expression and physiologic roles. Some CAs may serve as markers for tumors and hypoxia. CA XIV is a polypeptide consisting of an extracellular N-terminal catalytic domain, a membrane-spanning segment and a short intracellular C-terminal segment with several potential phosphorylation sites. A subset of CAs lack CA activity due to point mutations but retain esterase function. CA14 is widely expressed in the central nervous system.