

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

Catalog No. PKSM040970

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

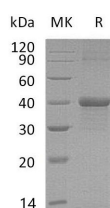
Description

Synonyms	Carbonic Anhydrase 14;Carbonate Dehydratase XIV;Carbonic Anhydrase XIV;CA-XIV;CA14;Ca14;Car14;Catm
Species	Mouse
Expression Host	E.coli
Sequence	Ala16-Met290
Accession	Q9WVT6
Calculated Molecular Weight	32.3 kDa
Observed molecular weight	40 kDa
Tag	N-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	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.
Reconstitution	Not Applicable

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

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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