Recombinant Mouse Carbonic Anhydrase 9/CA9 protein (His Tag)

Catalog Number: PDMM100206

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

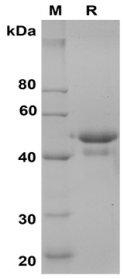
Description

Species	Mouse
Mol_Mass	42.8 kDa
Accession	Q8VHB5
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Mouse Carbonic Anhydrase 9/CA9 proteins, 2μg/lane of Recombinant Mouse Carbonic Anhydrase 9/CA9 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 50 KD.

Background

Carbonic anhydrases 9 (CA IX), also known as membrane antigen MN or CA9, is a member of the carbonic anhydrase (CA) family and may be involved in cell proliferation and cellular transformation. Cas are zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide (H2O + CO2 = H+ + HCO3–) and thus participate in a variety of biological and physical processes. CA IX protein is expressed primarily in carcinoma cells lines, and the expression is cell density dependent and has been shown to be strongly induced by hypoxia, accordingly facilitates adaptation of tumor cells to hypoxic conditions. It is involved in tumorigenesis through many pathways, such as pH regulation and cell adhesion control. CA IX is used as a marker of tumor hypoxia and as a new therapeutic target for many human carcinomas and cancers.

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