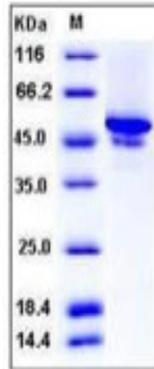


Ca9

Recombinant Mouse Carbonic Anhydrase 9 / CA-IX (His Tag)

Catalog No.	CRM673A-His CRM673B-His	Quantity:	10 µg 20 µg
Alternate Names:	Carbonic anhydrase 9, Carbonate dehydratase IX, Carbonic anhydrase IX, CA-IX, CAIX, Membrane antigen MN homolog		
Description:	Carbonic anhydrase 9 (CA-IX) 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 ($H_2O + CO_2 = H^+ + HCO_3^-$) 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.		
UniProt ID:	Q8VHB5		
Accession Number:	NP_647466.2		
Protein Construction:	A DNA sequence encoding the extracellular domain of mouse CA-IX (Met 1-Asp 390) was expressed, with a C-terminal polyhistidine tag.		
Source:	HEK293 Cells		
Formulation:	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
Molecular Weight:	The secreted rmCA-IX consists of 370 aa with a predicted MW of 40.3 kDa and migrates at ~45-50 kDa in SDS-PAGE under reducing conditions, due to glycosylation.		
Purity:	> 95 % as determined by SDS-PAGE.		
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method		
Biological Activity:	Measured by its esterase activity . The specific activity is >100 pmoles/min/µg .		
Predicted N-terminal:	Gln 32		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution.		
Storage & Stability:	Stable for up to 1 year from date of receipt at -20°C to -80°C After reconstitution, store working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.		

SDS-PAGE



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