

Carbonic Anhydrase IX / CA9 Active Protein | CA9 active protein

Recombinant Human Carbonic Anhydrase IX / CA9 Protein (His tag)

CATALOG #
AAA173576

HOST
Human Cells

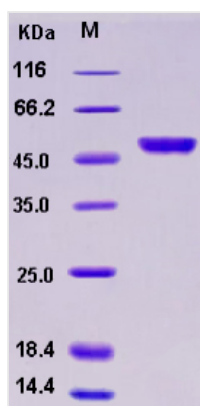
PRODUCT SYNONYMS

Carbonic Anhydrase IX / CA9; Recombinant Human Carbonic Anhydrase IX / CA9 Protein (His tag); CA9; CAIX; MN; CA9 active protein

PRODUCT SPECIFICATIONS

Host	Human Cells
Purity/Purification	> 95 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH 7.4
Sequence Length	459
Species	Human
Expression host	HEK293 Cells
Sequence	Met 1-Asp 414
Endotoxin	< 1.0 EU per mug of the protein as determined by the LAL method
Tag	C-His
Bio Activity	Measured by its esterase activity. The specific activity is >30 pmoles/min/ug, as measured with 1 mM 4-Nitrophenyl acetate and 2.5 ug enzyme at 400 nm in 100 uL of 12.5 mM Tris, 75 mM NaCl, pH 7.5.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -70°C. Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CA9 active protein	Background: Carbonic anhydrases IX (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 ($H_2O + CO_2 = H^+ + HCO_3^-$) 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. Description: A DNA sequence encoding the human carbonic anhydrase IX (CA9) precursor (NP_001207.2) (Met 1-Asp 414) was expressed with a polyhistidine tag at the C-terminus.
--	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	169636420
NCBI GeneID	768
NCBI Accession #	NP_001207.2
NCBI GenBank Nucleotide #	NM_001216.2
UniProt Accession #	Q16790; Q5T4R1
Molecular Weight	Mol Mass: 42.5 kDa AP Mol Mass: 48 kDa
NCBI Official Full Name	carbonic anhydrase 9
NCBI Official Synonym Full Names	carbonic anhydrase 9
NCBI Official Symbol	CA9
NCBI Official Synonym Symbols	MN; CAIX
NCBI Protein Information	carbonic anhydrase 9
UniProt Protein Name	Carbonic anhydrase 9
UniProt Gene Name	CA9
UniProt Synonym Gene Names	G250; MN; CA-IX; CAIX; RCC-associated antigen G250

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.