

## Product Information

### **MemDX™ Membrane Protein Human CA9 (Carbonic anhydrase 9) Expressed in NS0 for Antibody Discovery, Partial (59-414aa)**

Cat. No.: **MPX0299K**

This product is for research use only and is not intended for diagnostic use.

This product is a 42 kDa Human CA9 membrane protein expressed in NS0. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Human

##### Target Protein

CA9

##### Protein Length

Partial (59-414aa)

##### Protein Class

Receptor

##### Molecular Weight

42 kDa

##### TMD

1

##### Sequence

PLGEEDLPSEEDSPREEDPPGEEDLPGEEDLPGEEDLPEVKP  
KSEEEGSLKLEDLPTVEAPGDPQEPQNNNAHRDKEGDDQSHWRYGGDPPWP  
RVSPACAGRFRQSPVDIRPQLAAFCPALRPLELLGFQLPPLPELRLRNNGH  
SVQLTLPPGLEMALGPGREYRALQLHLHWGAAGRPGSEHTVEGHRFP AEI  
HVVHLSTAFARVDEALGRPGGLAVLAAFLEEGPEENSAYEQLLSRLEEIA  
EEGSETQVPGLDISALLPSDFSRYFQYEGSLTTPPCAQGVIVTFNQTV M  
LSAKQLHTLSDTLWGPGDSRLQLNFRATQPLNGRVIEASFPAGVDSSPRA  
AEPVQLNSCLAAGD

#### Product Description

##### Expression Systems

NS0

##### Tag

10xHis tag at the C-terminus

**Protein Format**

Soluble

**Form**

LYOPH

**Reconstitution**

Reconstitute at 100 µg/mL in sterile 25 mM Tris and 150 mM NaCl, pH 7.5.

**Endotoxin**

<1.0 EU per 1 µg of the protein by the LAL method.

**Purity**

>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Buffer**

Lyophilized from a 0.2 µm filtered solution in Tris and NaCl.

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

CA9

**Full Name**

Carbonic anhydrase 9

**Introduction**

Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12.

**Alternative Names**

CA9; MN; CAIX; CA-IX; P54/58N; RCC-associated antigen G250; RCC-associated protein G250; carbonate dehydratase IX; carbonic anhydrase IX; carbonic dehydratase; membrane antigen MN; pMW1; renal cell carcinoma-associated antigen G250; Carbonic anhydrase 9

**Gene ID**

[768](#)

**UniProt ID**

[Q16790](#)