

# Product Information

## MemDX™ Membrane Protein Human CA12 (Carbonic anhydrase 12) Full Length

Cat. No.: **MPC2491K**

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

This product is a made-to-order Human CA12 membrane protein expressed in HEK293. 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

CA12

#### Protein Length

Full length

#### Protein Class

Receptor

#### TMD

1

#### Sequence

MPRRSLHAAAVLLLVLKEQPSSPAPVNGSKWTFGPDGENSWSKKYPSC  
GGLLQSPIDLHSDILQYDASLTPLFQGYNLSANKQFLLTNNGHSVKNL  
PSDMHIQGLQSRYSATQLHLHWGNPNDPHGSEHTVSGQHFAAELHIVHYN  
SDLYPDASTASNKSEGLAVLAVLIEMGSFNPSYDKIFSHLQHVKYKGQEA  
FVPGFNIEELLPERTAEYYRYRGSLLTPPCNPTVLWTVFRNPVQISQEQL  
LALETALYCTHMDPSPREMINNFRQVQKFDERLVYTSFSQVQVCTAAGL  
SLGIILSLALAGILGICIVVVSIWLFRRKSIKKGDNKGVIYKPATKMET  
EAHA

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

**Target****Target Protein**

CA12

**Full Name**

Carbonic anhydrase 12

**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. This gene product is a type I membrane protein that is highly expressed in normal tissues, such as kidney, colon and pancreas, and has been found to be overexpressed in 10% of clear cell renal carcinomas. Three transcript variants encoding different isoforms have been identified for this gene.

**Alternative Names**

CA12; CAXII; CA-XII; T18816; HsT18816; carbonate dehydratase XII; carbonic anhydrase XII; carbonic dehydratase; tumor antigen HOM-RCC-3.1.3; Carbonic anhydrase 12

**Gene ID**

[771](#)

**UniProt ID**

[O43570](#)