

Product datasheet for PH309229

Carbonic Anhydrase IV (CA4) (NM_000717) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CA4 MS Standard C13 and N15-labeled recombinant protein (NP_000708)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209229
Predicted MW:	35.03 kDa
Protein Sequence:	>RC209229 representing NM_000717 Red=Cloning site Green=Tags(s) MRMLLALLALSARPSASAEHWCYEVQAESSNYPCLVPVKWGGNCQKDRQSPINIVTTKAKVDKLLGRF FFSGYDKKQTWTVQNNGHSVMMLLENKASISGGGLPAPYQAKQLHLHWSLDPYKGGSEHSLDGEHFAMEMH IVHEKEKGTSRNYKEAQDPEDEIAVLAFLVEAGTQVNEGFQPLVEALSNIPKPEMSTTMAESSLLDLLPK EEKLRHYFRYLGSLTTPTCDEKVWVTFREPIQLHREQILAFSQKLYYDKEQTVSMKDNVRPLQQLGQRT VIKSGAPGRPLPWALPALLGPMACLLAGFLR TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_000708</u>
RefSeq Size:	1104
RefSeq ORF:	936
Synonyms:	CAIV; Car4; RP17
Locus ID:	762



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UniProt ID: [P22748](#)

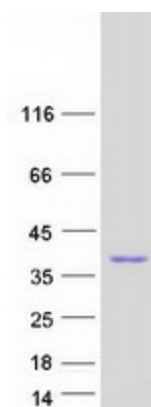
Cytogenetics: 17q23.1

Summary: 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. This gene encodes a glycosylphosphatidyl-inositol-anchored membrane isozyme expressed on the luminal surfaces of pulmonary (and certain other) capillaries and proximal renal tubules. Its exact function is not known; however, it may have a role in inherited renal abnormalities of bicarbonate transport. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Nitrogen metabolism

Product images:



Coomassie blue staining of purified CA4 protein (Cat# [TP309229]). The protein was produced from HEK293T cells transfected with CA4 cDNA clone (Cat# [RC209229]) using MegaTran 2.0 (Cat# [TT210002]).