

Product datasheet for **AR51997PU-N**

Carbonic anhydrase 8 (1-290, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Carbonic anhydrase 8 (1-290, His-tag) human protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSHMADLSF IEDTVAFPEK EEEEEEEEG VEWGYEEGVE WGLVFPDANG EYQSPINLNS REARYDPSLL DVRLSPNYW CRDCEVTNDG HTIQVILKSK SVLSGGPLPQ GHEFELYEVR FHWGRENQRG SEHTVNFKAF PMELHLIHWN STLFSGIDEA VGKPHGIAII ALFVQIGKEH VGLKAVTEIL QDIQYKGSK TIPCFNPNTL LPDPLLRDYW VYEGSLTIPP CSEGVTWILF RYPLTISQLQ IEEFRRLRTH VKGAELVEGC DGILGDNFRP TQPLSDRVIR AAFQ
Tag:	His-tag
Predicted MW:	35.5 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1 mM DTT
Bioactivity:	Specific: Specific activity is > 450 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 7.5 at 37C.
Preparation:	Liquid purified protein
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_001308766
Locus ID:	767
UniProt ID:	P35219
Cytogenetics:	8q12.1
Synonyms:	CA-RP; CA-VIII; CALS; CAMRQ3; CARP



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Summary:

The protein encoded by this gene was initially named CA-related protein because of sequence similarity to other known carbonic anhydrase genes. However, the gene product lacks carbonic anhydrase activity (i.e., the reversible hydration of carbon dioxide). The gene product continues to carry a carbonic anhydrase designation based on clear sequence identity to other members of the carbonic anhydrase gene family. The absence of CA8 gene transcription in the cerebellum of the *lurcher* mutant in mice with a neurologic defect suggests an important role for this acatalytic form. Mutations in this gene are associated with cerebellar ataxia, mental retardation, and dysequilibrium syndrome 3 (CMARQ3). Polymorphisms in this gene are associated with osteoporosis, and overexpression of this gene in osteosarcoma cells suggests an oncogenic role. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

Protein Families:

Druggable Genome

Protein Pathways:

Nitrogen metabolism

Product images: