

Carbonic anhydrase-1, human recombinant
CA1, CA-I, CAB
Catalog # PBV11528r**Specification**

Carbonic anhydrase-1, human recombinant - Product info

Primary Accession [P00915](#)
Calculated MW **31 kDa** **KDa**

Carbonic anhydrase-1, human recombinant - Additional Info

Gene ID	759
Other Names	
CA1, CA-I, CAB	
Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE;> 95%
Recombinant	Yes
Sequence	MGSSHHHHHH SSGLVPRGSH MASPDWGYDD KNGPEQWSKL YPIANGNNQS PVDIKTSETK HDTSLKPISV SYNPAKEI INVGHFHVN FEDNDNRSLV KGGPFSDSYR LFQFHFHWGS TNEHGSEHTV DGVKYSIELH VAHWNSAKYS SLAEAASKAD GLAVIGVLMK VGEANPKLQK VLDALQAIKT KGKRAPFTNF DPSTLLPSSL DFWTYPGSLT HPPLYESVTW IICKESISVS SEQLAQFRSL LSNVEGDNAV PMQHNNRPTQ PLKGRTVRAS F

Target/Specificity
CA1

Format
Liquid

Storage
-20°C;In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 10% glycerol

Carbonic anhydrase-1, human recombinant - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Carbonic anhydrase-1, human recombinant - Images

Carbonic anhydrase-1, human recombinant - Background

Carbonic anhydrase (CA) is an enzyme that catalyses rapid conversion of carbon dioxide to bicarbonate and protons ($\text{CO}_2 + \text{H}_2\text{O} \leftrightarrow \text{HCO}_3^- + \text{H}^+$). Most carbonic anhydrases contain a zinc ion in their active site and the primary function of this enzyme is known to maintain acid-base balance in blood and other tissues, and to help transport carbon dioxide of tissues. Carbonic anhydrases have been found in all kingdoms of life. Recombinant carbonic anhydrase fused to His-tag, was expressed in E.coli and purified by conventional chromatography techniques. 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.