Carbonic Anhydrase XIV/CA14, Human Recombinant

CATALOG NO:
P1582-20 20 µg
P1582-100 100 µg

ALTERNATE NAMES: Carbonic anhydrase 14, CAXiV

MOL. WT. 33.2 kDa (298aa) (N terminus His-Tag)

SOURCE: *E. coli*

PURITY: >85% SDS - PAGE

FORM: Liquid

FORMULATION: In 20 mM Tris-HCl buffer (pH 8.0) containing 0.15 M NaCl, 10% glycerol, 1 mM DTT

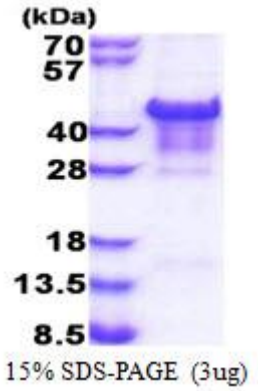
SPECIFIC ACTIVITY: > 700 pmol/min/ug

UNIT DEFINITION: One unit is 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 37°C.

STORAGE CONDITIONS: Store at 4°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION: 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. CA14 is predicted to be a type I membrane protein and shares highest sequence similarity with the other transmembrane CA isoform, CA XII; however, they have different patterns of tissue-specific expression and thus may play different physiologic roles. Recombinant human CA14 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

AMINO ACID SEQUENCE: aa 16-290



3 µg by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

RELATED PRODUCTS:

- Carbonic Anhydrase 3, human recombinant (7833)
- Human Recombinant Carbonic anhydrase 2 (6390)
- Carbonic anhydrase-8, human recombinant (P1047)
- Carbonic anhydrase-1, human recombinant (P1048)

FOR RESEARCH USE ONLY! Not to be used on humans.