

Human CellExp Carbonic Anhydrase 4/CA4, human recombinant protein

CA4, Carbonic anhydrase 4
Catalog # PBV11105r

Specification

Human CellExp Carbonic Anhydrase 4/CA4, human recombinant protein - Product info

Primary Accession P22748

Calculated MW

This protein is fused with polyhistidine tag
at the C-terminus, and has a calculated

at the C-terminus, and has a calculated MW of 31 kDa. The predicted N-terminus is Ala 19. DTT-reduced Protein migrates as 33

kDa in SDS-PAGE. KDa

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Gene ID 762
Gene Symbol CA4

Other Names

CA4, Carbonic anhydrase 4

Gene Source
Source
Human
HEK293 cells
Assay&Purity
SDS-PAGE; ≥92%

Assay2&Purity2 N/A;
Recombinant Yes

Results Measured by its esterase activity. The

specific activity is >2 pmol/min/ μg.

Target/Specificity
Carbonic Anhydrase 4/CA4

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μ g/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format

Lyophilized

Storage

-20°C; Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 150 mM NaCl, pH 7.5. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp Carbonic Anhydrase 4/CA4, human recombinant protein - Protocols

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

- Western Blot
- Blocking Peptides



- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Human CellExp Carbonic Anhydrase 4/CA4, human recombinant protein - Images

Human CellExp Carbonic Anhydrase 4/CA4, human recombinant protein - Background

Carbonic anhydrase 4 (CA4) is also known as Carbonate dehydratase IV, Carbonic anhydrase IV, which belongs to the alpha-carbonic anhydrase family. CA4 may stimulate the sodium/bicarbonate transporter activity of SLC4A4 that acts in pH homeostasis. It is essential for acid overload removal from the retina and retina epithelium, and acid release in the choriocapillaris in the choroid. The enzyme regulation is activated by histamine, L-adrenaline, D-phenylalanine, L- and D-histidine. CA4 can interact with SLC4A4.

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Okuyama T.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:1315-1319(1992). Okuyama T.,et al.Genomics 16:678-684(1993). Ota T.,et al.Nat. Genet. 36:40-45(2004). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Zody M.C.,et al.Nature 440:1045-1049(2006).