

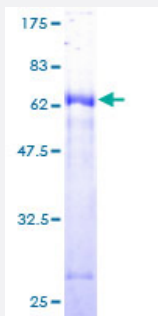
Full-Length

CA5B (Human) Recombinant Protein (P01)

Catalog # H00011238-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human CA5B full-length ORF (AAH28142, 1 a.a. - 317 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MVVMNSLRVILQASPGKLLWRKFQIPRFMPARPCSLYTCTYKTRNRALHPLWESVDLVPGGDRQ
SPINIRWRDSVYDPGLKPLTISYDPATCLHVWNNGYSFLVEFEDSTDKSVIKGGPLEHNYRLKQFH
FHWGAIDAWGSEHTVDSKCFPAELHLVHWNVRFENFEDAALEENGLAVIGVFLKLKGHHKELQ
KLVDTLPSIKHKDALVEFGSFDPSCLMPTCPDYWTYSGSLTPPLSESVTWIHKQPVEVDHDQLE
QFRTLLFTSEGEKEKRMVDNFRPLQPLMNRTVRSSFRHDYVLNVQAKPKPATSQATP

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

60.61

Interspecies Antigen Sequence

Mouse (89); Rat (88)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CA5B

Entrez GeneID[11238](#)**GeneBank Accession#**[BC028142](#)**Protein Accession#**[AAH28142](#)**Gene Name**

CA5B

Gene Alias

CA-VB, MGC39962

Gene Description

carbonic anhydrase VB, mitochondrial

Omim ID[300230](#)**Gene Ontology**[Hyperlink](#)**Gene 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. CA VB is localized in the mitochondria and shows the highest sequence similarity to the other mitochondrial CA, CA VA. It has a wider tissue distribution than CA VA, which is restricted to the liver. The differences in tissue distribution suggest that the two mitochondrial carbonic anhydrases evolved to assume different physiologic roles. [provided by RefSeq]

Other Designations

carbonic dehydratase

Pathway

- [Nitrogen metabolism](#)