abcam

Product datasheet

Recombinant E. coli Carbonic anhydrase 2/CA2 protein ab87351

1 Image

Description

Product name	Recombinant E. coli Carbonic anhydrase 2/CA2 protein
Purity	> 95 % SDS-PAGE. ab87351 is purified using conventional chromatography techniques.
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Escherichia coli
Sequence	MGSSHHHHHH SSGLVPRGSH MKDIDTLISN NALWSKMLVE EDPGFFEKLA QAQKPRFLWI GCSDSRVPAE RLTGLEPGEL FVHRNVANLV IHTDLNCLSV VQYAVDVLEV EHIIICGHYG CGGVQAAVEN PELGLINNWL LHIRDIWFKH SSLLGEMPQE RRLDTLCELN VMEQVYNLGH STIMQSAWKR GQKVTIHGWA YGIHDGLLRD LDVTATNRET LEQRYRHGIS NLKLKHANHK
Description	Recombinant *E. coli* Carbonic anhydrase 2/CA2 protein

Specifications

Our **Abpromise guarantee** covers the use of **ab87351** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid

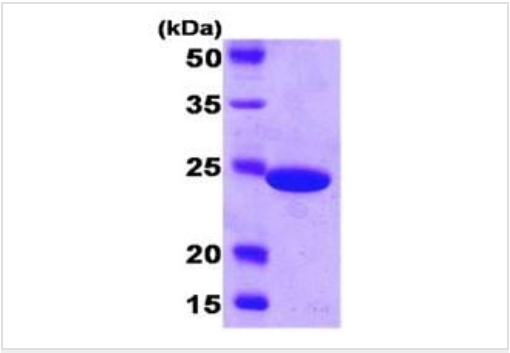
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. pH: 8.00 Constituents: 0.0154% DTT, 0.242% Tris

General Info

Function	Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrates cyanamide to urea. Involved in the regulation of fluid secretion into the anterior chamber of the eye.
Involvement in disease	Defects in CA2 are the cause of osteopetrosis autosomal recessive type 3 (OPTB3) [MIM:259730]; also known as osteopetrosis with renal tubular acidosis, carbonic anhydrase II deficiency syndrome, Guibaud-Vainsel syndrome or marble brain disease. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. Autosomal recessive osteopetrosis is usually associated with normal or elevated amount of non-functional osteoclasts. OPTB3 is associated with renal tubular acidosis, cerebral calcification (marble brain disease) and in some cases with mental retardation.
Sequence similarities	Belongs to the alpha-carbonic anhydrase family.
Cellular localization	Cytoplasm.

Images



SDS-PAGE - Recombinant *E. coli* Carbonic anhydrase 2/CA2 protein (ab87351)

ab87351 on 15% SDS-PAGE (3µg)

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
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