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YBD072Hu01 10µg

Recombinant Carbonic Anhydrase VB, Mitochondrial (CA5B)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

> 9th Edition (Revised in Jul, 2013)

[PROPERTIES]

Residues: Cys34~Pro317 (Accession # Q9Y2D0), with two

N-terminal Tags, His-tag and T7-tag.

Host: *E. coli*

Subcellular Location: Mitochondrion.

Purity: >95%

Endotoxin Level: <1.0EU per 1 µ g (determined by the

LAL method).

Formulation: Supplied as lyophilized form in PBS, pH7.4, containing 1mM DTT, 5% trehalose,

sarcosyl and preservative.

15% SDS-PAGE

Predicted isoelectric point:

The possible reasons that the actual band size differs from the predicted are as follows: 6.6 Predicted Molecular Mass:

36. 4kDa

Accurate Molecular Mass: 33kDa as determined by SDS-PAGE reducing

conditions. Applications: SDS-PAGE; WB; ELISA; IP.

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(May be suitable for use in other assays to be determined by the end user.)

Note:

- 1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
- 2. Relative charge: The composition of amino acids may affects the charge of the protein.
- 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
- 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
- 5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in sterile PBS, pH7. 2-pH7. 4.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCES]

The target protein is fused with two N-terminal Tags, His-tag and T7-tag, its sequence is listed below.

MGSSHHHHHH SSGLVPRGSH MASMTGGQQM GRGSEF- CSLYTCT YKTRNRALHP

LWESVDLVPG GDRQSPINIR WRDSVYDPGL KPLTISYDPA TCLHVWNNGY SFLVEFEDST



DKSVIKGGPL EHNYRLKQFH FHWGAIDAWG SEHTVDSKCF PAELHLVHWN AVRFENFEDA
ALEENGLAVI GVFLKLGKHH KELQKLVDTL PSIKHKDALV EFGSFDPSCL MPTCPDYWTY
SGSLTTPPLS ESVTWIIKKQ PVEVDHDQLE QFRTLLFTSE GEKEKRMVDN FRPLQPLMNR
TVRSSFRHDY VLNVQAKPKP ATSQATP

[REFERENCES]

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- 2. Koehler K., et al. (2007) Angew. Chem. Int. Ed. Engl. 46:7697-7699.
- 3. Temperini C., et al. (2007) Bioorg. Med. Chem. Lett. 17:2210-2215.
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