Recombinant human CDA protein

Catalog Number: ATGP0739

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-146aa

UniProt No.
P32320

NCBI Accession No.
AAH54036.1

Alternative Names
Cytidine deaminase, CDD, Cytidine aminohydrolase, Cytosine nucleoside deaminase, Cytidine deaminase

PRODUCT SPECIFICATION

Molecular Weight
18.3 kDa (166aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 2mM EDTA, 100mM NaCl, 40% glycerol

Purity
> 90% by SDS-PAGE

Biological Activity
Specific activity is > 10,000pmol/min/ug, and is defined as the amount of required to deaminate 1.0pmole of cytidine per min at pH 7.5 at 25C.

Tag
His-Tag

Application
SDS-PAGE, Enzyme Activity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
CDA (Cytidine deaminase) is an enzyme that scavenges exogenous and endogenous cytidine and 2-deoxycytidine for uMP synthesis. This protein is one of several deaminases responsible for maintaining the cellular pyrimidine pool. The protein also catalyzes the deamination of chemotherapeutic cytosine nucleoside

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analogs such as Ara-C and 5-azacytidine, which results in the loss of their cytotoxic and antitumor function. It can form homotetramers and is mainly expressed in granulocytes. Recombinant human CDA protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

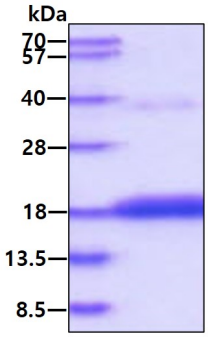
<MGSSHHHHHH SSGLVPRGSH> MAQKRPACTL KPECVQQLLV CSQEAKQSAY CPYSHFPVGA ALLTQEGRIF KGCNIENACY PLGICAERTA IQKAVSEGYK DFRAIAIASD MQDDFISPCG ACRQVMREFG TNWPVYMTKP DGTYIVMTVQ ELLPSSFGPE DLQKTQ

General References

Evrard A., et al. (2010) Ther Drug Monit. 32(1):53-60.
Seeberg EC., et a/. (1998) Blood. 91(11):4127-35.

DATA

SDS-PAGE



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