

Recombinant human Guanine deaminase/GDA protein

Catalog Number: ATGP3394

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-454aa

UniProt No.

Q9Y2T3

NCBI Accession No.

NP_004284

Alternative Names

Guanine deaminase isoform b, Guanase, Guanine aminase, Guanine aminohydrolase, GAH, p51-nedasin, CYPIN, Cytoplasmic PSD-95 interactor

PRODUCT SPECIFICATION

Molecular Weight

51 kDa (454aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Biological Activity

Specific activity is > 2,000pmol/min/ug, and is defined as the amount of enzyme that convert guanine to xanthine per minute at pH 8.0 at 37C.

Tag

Non-Tagged

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

GDA, also known as guanine deaminase, catalyzes the hydrolytic deamination of guanine, producing xanthine and ammonia. Studies in rat ortholog suggest this gene plays a role in microtubule assembly. Multiple transcript

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variants encoding different isoforms have been found for this gene. Recombinant human GDA, was expressed in *E. coli* and purified by conventional chromatography techniques.

Amino acid Sequence

MCAAQMPPLA HIFRGTFVHS TWTCPMEVLR DHLLGVSDSG KIVFLEEASQ QEKLAKEWCF KPCEIRELSH HEFFMPGLVD
THIHASQYSF AGSSIDLPLL EWLTKYTFPA EHRFQNIQFA EEVYTRVRR TLKNGTTTAC YFATIHTDSS LLLADITDKF
GQRAFGKVC MDLNDTFPEY KETTEESIKE TERFVSEMLQ KNYSRVKPIV TPRFSLSCSE TLMGELGNIA KTRDLHIQSH
ISENRDEVEA VKNLYPSYKN YTSVYDKNNL LTNKTVMAHG CYLSAEELNV FHERGASIAH CPNSNLSLSS GFLNVLEVLK
HEVKIGLGTD VAGGYSYML DAIRRAVMVS NILLINKVNE KSLTLKEVFR LATLGGSQAL GLDGEIGNFE VGKEFDAILI
NPKASDSPID LFYGDFFGDI SEAVIQKFLY LGDDRNIEEV YVGGKQVVPF SSSV

General References

Gang Yuan, James C. Bin, et al. (1999). *J Biol. Chem.* 274(12):8175-80
Trautwein-Schult A, et al (2014) *J Mol Microbiol Biotechnol.* 24(2):67-81

DATA

SDS-PAGE

(kDa)

150
100
70
50
35
25
20
15



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

15% SDS-PAGE (3ug)