PRODUCT INFORMATION

Expression system E.coli

Domain 1-299aa

UniProt No. 075792

NCBI Accession No. NP_006388

Alternative Names Ribonuclease H2 subunit A, AGS4, JuNB, RNASEHI, RNHIA, RNHL

PRODUCT SPECIFICATION

Molecular Weight 35.8 kDa (322aa)

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 85% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE, Denatured

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

Ribonuclease H2 subunit A, also known as RNASEH2A, belongs to the RNase HII family and eukaryotic subfamily. Localized to the nucleus, RNASEH2A mediates the removal of Okazaki fragment RNA primers that are present on the lagging strand during DNA replication. RNASEH2A catalyzes the endonucleolytic cleavage of RNA to a 5'phosphomonoester and is able to bind magnesium or manganese as cofactors. Defects in RNASEH2A are the cause of Aicardi-Goutieres syndrome type 4 (AGS4). Recombinant human RNASEH2A protein, fused to His-tag at N-terminus, was expressed in E. coli



Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSMDLSELE RDNTGRCRLS SPVPAVCRKE PCVLGVDEAG RGPVLGPMVY AICYCPLPRL ADLEALKVAD SKTLLESERE RLFAKMEDTD FVGWALDVLS PNLISTSMLG RVKYNLNSLS HDTATGLIQY ALDQGVNVTQ VFVDTVGMPE TYQARLQQSF PGIEVTVKAK ADALYPVVSA ASICAKVARD QAVKKWQFVE KLQDLDTDYG SGYPNDPKTK AWLKEHVEPV FGFPQFVRFS WRTAQTILEK EAEDVIWEDS ASENQEGLRK ITSYFLNEGS QARPRSSHRY FLERGLESAT SL

General References

Frank P., et al. (1998) Proc Natl Acad Sci uSA. 95:12872-12877. Bayliss C D., et al. (2005) Nucleic Acads Res. 33:400-408.

DATA



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