

Recombinant human RNGTT protein

Catalog Number: ATGP2805

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-597aa

UniProt No.

O60942

NCBI Accession No.

NP_003791

Alternative Names

mRNA-capping enzyme, RNA guanylyltransferase and 5'-phosphatase, CAP1A, hCAP, HCE, HCE1

PRODUCT SPECIFICATION

Molecular Weight

70.9 kDa (620aa)

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 0.2M NaCl, 40% glycerol, 2mM DTT, 0.1mM PMSF

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

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

RNGTT is a bifunctional mRNA-capping enzyme exhibiting RNA 5'-triphosphatase activity in the N-terminal part and mRNA guanylyltransferase activity in the C-terminal part. It catalyzes the first two steps of cap formation: by removing the gamma-phosphate from the 5'-triphosphate end of nascent mRNA to yield a diphosphate end, and by transferring the gmp moiety of GTP to the 5'-diphosphate terminus. Recombinant human RNGTT protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

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Amino acid Sequence

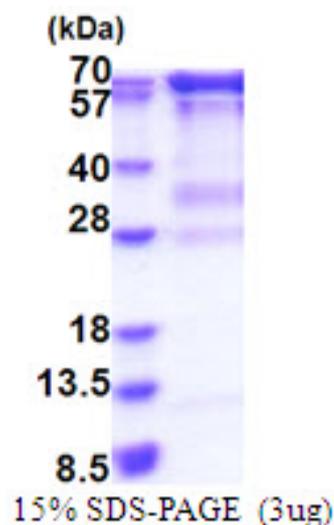
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HGFNRTGFLI CAFLVEKMDW SIEAAVATFA QARPPGIYKG DYLKELFRRY GDIEEAPPPP LLPDWCFEDD EDEDEDEDGK
KESEPGSSAS FGKRRKERLK LGAIFLEGVT VKGVTQVTTQ PKLGEVQQKC HQFCGWEGSG FPGAQPVSM DQNIKLLDLK
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NSQPVGDCDF NVRLQCIERE IISPRHEKMK TGLIDKTQEP FSVRNKPPFD ICTSRKLLEG NFAKEVSHEM DGLIFQPTGK
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RQRDTSFPN AYNTAMAVCN SISNPVTKE M LFEFIDRCTA ASQGQKRKHH LDPDTELMPP PPPKRPRPLT

General References

Yue Z., Maldonado E et al.(1997) Proc. Natl. Acad. Sci. u.S.A. 94:12898-12903.

DATA

SDS-PAGE



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