

RNGTT, 1-597aa, Human, His tag, E.coli

Cat.NO.: TP03756

3th Edition

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

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.

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

Molecular Weight:70.9 kDa (620aa)

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMAHNKIPPRWLNCPRRGQPVAGRFLPLKTM LGPRYDSQVAEENRFHPSML
SNYLKSLKVKMGLLDLTNTSRFYDRNDIEKEGKIYIKLQCKGHGECPTTENTETFIRLCERFNERNPPELIGVHCTH
GFNRTGFLICAFLEKMDWSIEAAVATFAQARPPGIYKGDYKELFRRYGDIEEAPPPLLPDWCFEDEDEDEDED
GKKESEPGSSASFGKRRKERLKLGAIFLEGVTVKGVTVTTQPKLGEVQQKCHQFCGWEGSGFPGAQPVSMKQ
NIKLLDLKPYKVSWKADGTRYMMLIDGTNEVFMIDRDNV FHVSNLEFPFRKDLRMHLSNTLLDGEMIIDRVNGQAV
PRYLIYDIIFNSQPVGDCDFNVRLQCIEREIISPRHEKMKTGLIDKTQEPFSVRNKPFDDICTSRKLLGNFAKEVSH
EMDGLIFQPTGKYKPGRCDDILKWKPPSLNSVDFRLKITRMGGEGLLPQNVGLLYVGGYERPFAQIKVTKELKQYD
NKIECKFENNSWVFMQRRTDKSFPNAYNTAMAVCNSISNPVTKEMLFEFIDRCTAASQGQKRKHHLDPDELMPP
PPPKRPRPLT

Purity:> 95% by HPLC

Concentration:0.25 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.