

32-13700: RNPA E.Coli

Format : RNPA protein solution (0.25mg/ml) in Phosphate-Buffered Saline (pH 7.4) and 10% Glycerol.
Alternative Name : ECK3696, Rnase P protein, RnaseP protein, b3704, JW3681, Ribonuclease P protein component, EC 3.1.26.5, Protein C5.

Description

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered colorless solution.

Biological Activity: null

Rnase P protein, AKA rnpA, is an important enzyme consisting of the C5 protein (which encoded by rnpA) and the catalytic M1 RNA (encoded by rnpB) subunits. rnpA is ribonucleoprotein that catalyzes the removal of the 5'-leader elements of precursor tRNAs and generates the mature 5'-end of tRNAs. This step is critical for the formation of functional tRNA molecules in bacteria, archaea and eukarya. More importantly, it has lately been established that RNase P is essential for the endonucleolytic separation of certain polycistronic tRNA transcripts such as valV valW, leuQ leuP leuV and secG leuU. Therefore, it was hypothesized that the essential function of RNase P might be related to the complete absence of a particular tRNA that was dependent on the enzyme for initial separation from polycistronic transcripts.

RNPA E.Coli Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 119 amino acids (1-119a.a) and having a molecular mass of 13.7kDa. RNPA is purified by proprietary chromatographic techniques.

Product Info

Amount : 10 µg / 2 µg
Purification : Greater than 90.0% as determined by SDS-PAGE.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid : MVKLAFPREL RLLTPSQFTF VFQQPQRAGT PQITILGRLN SLGHPRIGLT VAKKNVRRAH
ERNRIKRLTR ESFRLRQHEL PAMDFVVVAK KGVADLDNRA LSEALEKLWR RHCRLARGS