Recombinant E.coli 30S ribosomal protein S4

Catalog No: #AP72024

Package Size: #AP72024-1 20ug #AP72024-2 100ug #AP72024-3 1mg

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Description

Product Name	Recombinant E.coli 30S ribosomal protein S4
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:2-206aaSequence Info:Full Length
Accession No.	P0A7V8
Uniprot	P0A7V8
GeneID	35807177;947793;
Calculated MW	27.3 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	ARYLGPKLKLSRREGTDLFLKSGVRAIDTKCKIEQAPGQHGARKPRLSDYGVQLREKQKVRRIYGVLERQFRN YYKEAARLKGNTGENLLALLEGRLDNVVYRMGFGATRAEARQLVSHKAIMVNGRVVNIASYQVSPNDVVSIRE KAKKQSRVKAALELAEQREKPTWLEVDAGKMEGTFKRKPERSDLSADINEHLIVELYSK
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

One of two assbly initiator proteins for the 30S subunit, it binds directly to 16S rRNA where it nucleates assbly of the body of the 30S subunit.With S5 and S12 plays an important role in translational accuracy; many suppressors of streptomycin-dependent mutants of protein S12 are found in this protein, some but not all of which decrease translational accuracy (ram, ribosomal ambiguity mutations).Plays a role in mRNA unwinding by the ribosome, possibly by forming part of a processivity clamp.Protein S4 is also a translational repressor protein, it controls the translation of the alpha-operon (which codes for S13, S11, S4, RNA polymerase alpha subunit, and L17) by binding to its mRNA.Also functions as a rho-dependent antiterminator of rRNA transcription, increasing the synthesis of rRNA under conditions of excess protein, allowing a more rapid return to homeostasis. Binds directly to RNA polymerase.

References

Nucleotide sequence of the alpha ribosomal protein operon of Escherichia coli.Bedwell D.M., Davis G.R., Gosink M., Post L.E., Nomura M., Kestler H., Zengel J.M., Lindahl L.Nucleic Acids Res. 13:3891-3903(1985)Research Topic:Others

Note: This product is for in vitro research use only