## PRODUCT INFORMATION

## Expression system

E.coli

## Domain

1-243aa
UniProt No.
P23396
NCBI Accession No.
NP_000996.2

## Alternative Names

40 ribosomal protein S3

## PRODUCT SPECIFICATION

## Molecular Weight

28.8 kDa (263aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

## Concentration

1mg/ml (determined by Bradford assay)

## Formulation

Liquid in. 20 mM Tris- HCl buffer (pH 8.0) containing $1 \mathrm{mM} \mathrm{DTT} 10 \$,$% glycerol, 0.1 \mathrm{M} \mathrm{NaCl}$
Purity
> 90\% by SDS-PAGE

## Tag

His-Tag

## Application

SDS-PAGE

## Storage Condition

Can be stored at +2 C to +8 C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

## Description

40S ribosomal protein S3, also known as RPS3, belongs to the S3P family of ribosomal proteins. RPS3 mediates the formation of the mRNA binding site 3 ' of the codon in the decoding site. In addition, RPS3 is involved in DNA damage recognition as shown by its affinity for abasic sites and 7, 8-dihydro-8-oxoguanine residues and its interaction with human base excision repair proteins OGG1 and Ref-1. Higher levels of expression of this gene in colon adenocarcinomas and adenomatous polyps compared to adjacent normal colonic mucosa have been observed. Recombinant human RPS3 protein, fused to His-tag at N-terminus, was expressed in E. coli and
purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MAVQISKKRK FVADGIFKAE LNEFLTRELA EDGYSGVEVR VTPTRTEIII LATRTQNVLG EKGRRIRELT AVVQKRFGFP EGSVELYAEK VATRGLCAIA QAESLRYKLL GGLAVRRACY GVLRFIMESG AKGCEVVVSG KLRGQRAKSM KFVDGLMIHS GDPVNYYVDT AVRHVLLRQG VLGIKVKIML PWDPTGKIGP KKPLPDHVSI VEPKDEILPT TPISEQKGGK PEPPAMPQPV PTA

## General References

Hegde V (2006) DNA Repair. 5:810-815.
Choi S H., et al. (2006) J Biochem Mol Biol. 39:208-215.

## DATA

## SDS-PAGE



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

