



## Human RPS3 peptide (DAG-P1943)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

#### Antigen Description

Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit, where it forms part of the domain where translation is initiated. The protein belongs to the S3P family of ribosomal proteins. Studies of the mouse and rat proteins have demonstrated that the protein has an extraribosomal role as an endonuclease involved in the repair of UV-induced DNA damage. The protein appears to be located in both the cytoplasm and nucleus but not in the nucleolus. Higher levels of expression of this gene in colon adenocarcinomas and adenomatous polyps compared to adjacent normal colonic mucosa have been observed. This gene is co-transcribed with the small nucleolar RNA genes U15A and U15B, which are located in its first and fifth introns, respectively. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the ribosomal protein S3P family. Contains 1 KH type-2 domain.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

### GENE INFORMATION

**Gene Name** [RPS3 ribosomal protein S3 \[ Homo sapiens \(human\) \]](#)

<b>Official Symbol</b>	RPS3
<b>Synonyms</b>	RPS3; ribosomal protein S3; S3; 40S ribosomal protein S3; IMR-90 ribosomal protein S3;
<b>Entrez Gene ID</b>	<a href="#">6188</a>
<b>mRNA Refseq</b>	<a href="#">NM_001005.4</a>
<b>Protein Refseq</b>	<a href="#">NP_000996.2</a>
<b>UniProt ID</b>	P23396
<b>Chromosome Location</b>	11q13.3-q13.5
<b>Pathway</b>	Activation of the mRNA upon binding of the cap-binding complex and eIFs, and subsequent binding to 43S, organism-specific biosystem; Cap-dependent Translation Initiation, organism-specific biosystem; Cytoplasmic Ribosomal Proteins, organism-specific biosystem; Disease, organism-specific biosystem; Eukaryotic Translation Elongation, organism-specific biosystem; Eukaryotic Translation Initiation, organism-specific biosystem; Eukaryotic Translation Termination, organism-specific biosystem; Formatio
<b>Function</b>	DNA-(apurinic or apyrimidinic site) lyase activity; NF-kappaB binding; damaged DNA binding; endonuclease activity; enzyme binding; iron-sulfur cluster binding; mRNA binding; poly(A) RNA binding; protein binding; protein kinase A binding; protein kinase bi