



## Human U1 Small Nuclear Ribonucleoprotein particle 68/70 (U1 snRNP 68/70)

<b>Origin:</b>	Recombinant	<b>Cat. No.:</b>	41500
<b>Tag:</b>	N-terminal 6xHis	<b>Size:</b>	0.1 mg
<b>Source:</b>	<i>Spodopterafrugiperda</i> Sf9	<b>Purity:</b>	>90%
<b>Other names:</b>	SnRNP70, RNP68/70, RNP68, RNP70	<b>Species:</b>	Human

### Description

Expressed in E.coli with total 480 AA. Mw:56.5 kDa(calculated).  
N-terminal 6xHis-tag and TEV cleavage site, 44 extra AA (highlighted).  
**Recombinant antigen for research use or manufacturing only.**

### Introduction to the Molecule

Small nuclear ribonucleoprotein complexes are essential for splicing of precursor mRNA molecules. U1-snRNP is the most abundant RNP particle in the nucleus and consists of one small uridylate-rich RNA (U1 RNA) complexed with several proteins: the three 68/70 kDa, A, C polypeptides are unique to the U1-snRNP particle, whereas 7 so-called Sm proteins (B/B', D1, D2, D3, E, F, G) form a core subparticle that is common to all U-snRNP complexes. Antibodies against the 68/70 kDa protein are known to have a high clinical significance in MCTD patients.

### Immunological Function

As an autoantigen, RNP68/70 binds with IgG-type human auto-antibodies.

### Applications

Standard ELISA test, line/dot assay and microarray assay with positive/negative sera panels.

### Amino Acid Sequence

**MRGSHHHHHHGMASMTGGQMQMRDLYDDDDKDRWGSENL~~YFQGA~~TQFLPPNLLALF**  
APRDPIPYLPPLEKLPHEKHNNQPYCGIAPYIREFEDPRDAPPPTRAETREERMERKRREKIERRQ  
QEVETELKMWDPHNDPNAQGDAFKTLFVARVNYDTTESKLRREFEVYGP~~IKRIH~~MOVYSKRSGK  
PRGYAFIEYEHERDMHSAYKHADGKKIDGRRVLVDVERGRTVKGWRPRRLGGGLGGTRRGGA  
DVNIRHSGRDDTSRYDERPGPSPLPHRDRDRDRERERRERSRERDKERERRRSRSDRRRRS  
RSRDKEERRRSRERSKDKDRDRKRRSSRSRERARRERERKEELRGGGGDMAEPSEAGDAPPD  
DGPPGELGPDGPDGPEEKGRDRDRERRRSHRSERERRRDRDRDRDRDREHKRGERGSRGR  
DEARGGGGGQDNGLEGLGNDSRDMYMESEGGDGYLAPENGYLMEAAPE

### Formulation

Liquid in 8M Urea buffer(pH 8.0) with protease inhibitor.





## Storage

Store at  $-80^{\circ}\text{C}$ . Avoid repeated freezing/thawing cycles.

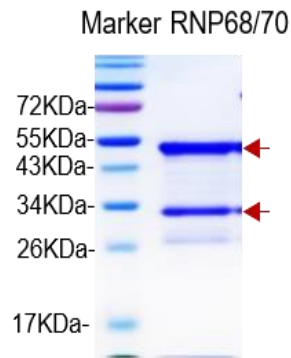
## Quality Control Test

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

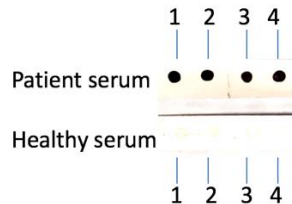
Immunodot analysis to determine functionality of protein.

## SDS-PAGE gel



## Dot blot assay

### Dot blot analysis of RNP68



Analysis of serum from healthy subjects and patients. Recombinant autoantigens were utilized in this dot-blot assay for validation

## Contact Us

- Website: [www.immunodiagnostics.com.hk](http://www.immunodiagnostics.com.hk)
- E-mail: [info@immunodiagnostics.com.hk](mailto:info@immunodiagnostics.com.hk)
- Tel: (+852) 2831 5526; 2831 5508
- Fax: (+852) 2816 2095

