# Human Small Nuclear Ribonucleoprotein Polypeptide A (snRNP A)

| | | | |
|---|---|---|---|
| **Origin:** | Recombinant | **Cat. No.:** | 41510 |
| **Tag:** | N-terminal 6xHis | **Size:** | 0.1 mg |
| **Source:** | *Spodoptera frugiperda* Sf9 | **Purity:** | >90% |
| **Other Names:** | U1snRNPA, RNPA, RNP-A | **Species:** | Human |

## Description

Expressed in insect Sf9 cells with total 306 AA. Mw: 34.2 KDa (calculated).
N-terminal 6xHis-tag and TEV cleavage site, 25 extra AA (highlighted).
**Recombinant antigen for research use or manufacturing only.**

## Introduction to the Molecule

Small nuclear ribonucleoprotein complexes (abbreviated as U-snRNP) 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, and the three 68/70 kDa (snRNP68/70), A polypeptides (snRNPA) and C polypeptides (snRNPC) are unique to the U1-snRNP particle.
Autoantibodies to U1-snRNP are present in 95% of patients with Mixed Connective Tissue Disease (MCTD) and 30% of patients with SLE.

## Immunological Function

As an autoantigen, RNP-A binds with IgG-type human auto-antibodies.

## Amino Acid Sequence

**MSYYHHHHHHDYDIPTTENLYFQGA**AVPETRPNHTIYINNLNEKIKKDELKKSLYAIFSQFG
QILDILVSRSLKMRGQAFVIFKEVSSATNALRSMQGFPFYDKPMRIQYAKTDSDIIAKMKGTFVE
RDRKREKRKPKSQETPATKKAVQGGGATPVVGAVQGPVPGMPPMTQAPRIMHHMPGQPPYMP
PPGMIPPPGLAPGQIPPGAMPPQQLMPGQMPPAQPLSENPPNHILFLTNLPEETNELMLSMLFNQ
FPGFKEVRLVPGRHDIAFVEFDNEVQAGAARDALQGFKITQNNAMKISFAKK

## Applications

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

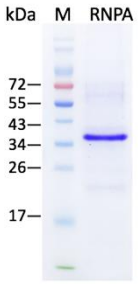
## Formulation

Liquid in storage buffer (50mM Tris, 300-500mM NaCl, 10% Glycerol, Protease inhibitor, pH8.0).

## Storage
Store at –80°C. Avoid repeated freezing/thawing cycles.

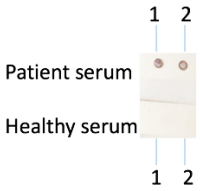
## Quality Control Test
BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
Immunodot analysis to determine functionality of protein.

## SDS-PAGE Gel




## Dot blot assay

**Dot blot analysis of RNPA**




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
- E-mail: info@immunodiagnostics.com.hk
- Tel: (+852) 2831 5526; 2831 5508
- Fax: (+852) 2816 2095