



RNP A Antigen (Sm-free) (DAG-T1222)

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

PRODUCT INFORMATION

Size	0.20 mg
------	---------

Preservative	None
--------------	------

BACKGROUND

Introduction

Ribonucleoprotein (RNP) is a nucleoprotein that contains RNA, i.e. it is an association that combines ribonucleic acid and protein together (referred also as protein-RNA complexes). A few known examples include the ribosome, the enzyme telomerase, vault ribonucleoproteins, RNase P, hnRNP and small nuclear RNPs (snRNPs), which are implicated in pre-mRNA splicing (spliceosome) and are among the main components of the nucleolus.

Currently, over 2000 RNPs can be found in PDB database. Based on known structures some common features of protein-RNA interface were deduced. For example, RNP in snRNPs has an RNA-binding motif in its RNA-binding protein. Aromatic amino acid residues in this motif result in stacking interactions with RNA. Lysine residues in the helical portion of RNA-binding proteins help to stabilize interactions with nucleic acids. This nucleic acid binding is strengthened by electrostatic attraction between the positive lysine side chains and the negative nucleic acid phosphate backbones. Additionally, it is possible to model RNPs computationally.

RNPs among many can play an important role in influenza A virus replication. The viral RNA is transcribed into mRNAs by the RNA polymerase attached to the RNPs.

Keywords	RNP A;RNP A Antigen (Sm-free);RNP A (Sm-free);RNP A (Sm-free);
----------	--