



# Human Ro/SS-A [His] (52 kDa) (DAG4851)

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

## PRODUCT INFORMATION

<b>Species</b>	Human
<b>Purity</b>	>90% as determined by SDS-PAGE
<b>Conjugate</b>	His
<b>Applications</b>	WB, ELISA
<b>Molecular Weight</b>	55 kDa
<b>Format</b>	Liquid
<b>Concentration</b>	Batch dependent - please inquire should you have specific requirements
<b>Size</b>	50 µg
<b>Preservative</b>	None
<b>Storage</b>	2-8°C short term, -20°C long term

## BACKGROUND

### Introduction

The Ro/SS-A antigen is a ribonucleoprotein complex and consists of two major proteins of 52 and 60 kDa, complexed with one specific RNA chain (either hY1, hY2, hY3 or hY5, which all are transcripts of RNA polymerase III); the Ro/SS-A (60 kDa) protein is the RNA-binding protein in the complex. The cellular function of this complex is still unresolved, as is the question whether the antigen is primarily located in the cytoplasm or in the nucleus or even shuttles between the 2 compartments. The Ro complex has recently been implicated in small RNA quality control and the enhancement of cell survival following exposure to ultraviolet irradiation. Ro/SS-A antibodies occur with a prevalence of 60-90% in Sj gren syndrome patients, but also with a prevalence of 25-50% in SLE patients and higher prevalences in subacute cutaneous LE

patients. Neonatal lupus syndrome (congenital heart block, photosensitivity, skin lesions) is also associated with the presence of Ro/SS-A autoantibodies in the maternal and neonatal sera, in particular when these autoantibodies are directed to the 52-kDa antigen. There is a high risk of neonatal lupus if the mother is positive for Ro/SS-A (52 kDa) and La/SS-B antibodies. It should be noted that preparation of native Ro complexes from natural sources often contain substoichiometric and variable amounts of Ro/SS-A (52 kDa) protein, which complicates the detection of autoantibodies against the 52 kDa antigen and points to the usefulness of the recombinant Ro/SS-A (52 kDa) antigen.

---

**Keywords**

Ro/SS-A; Ribonucleoprotein particle; Ro(SS-A)

---