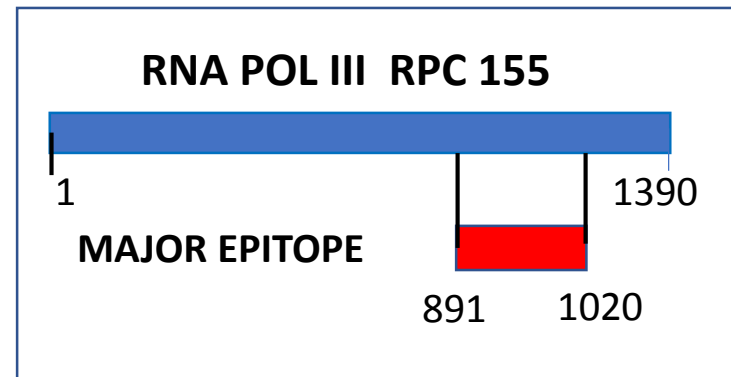
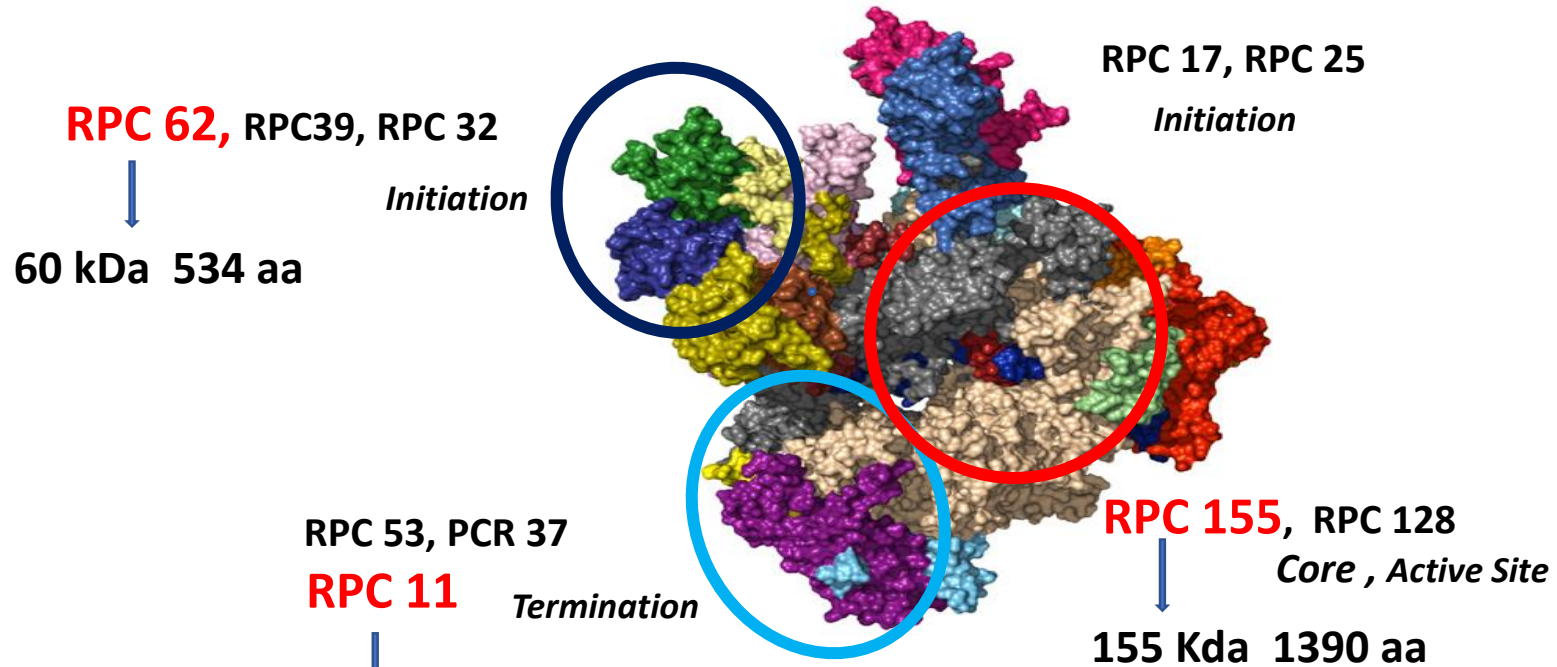
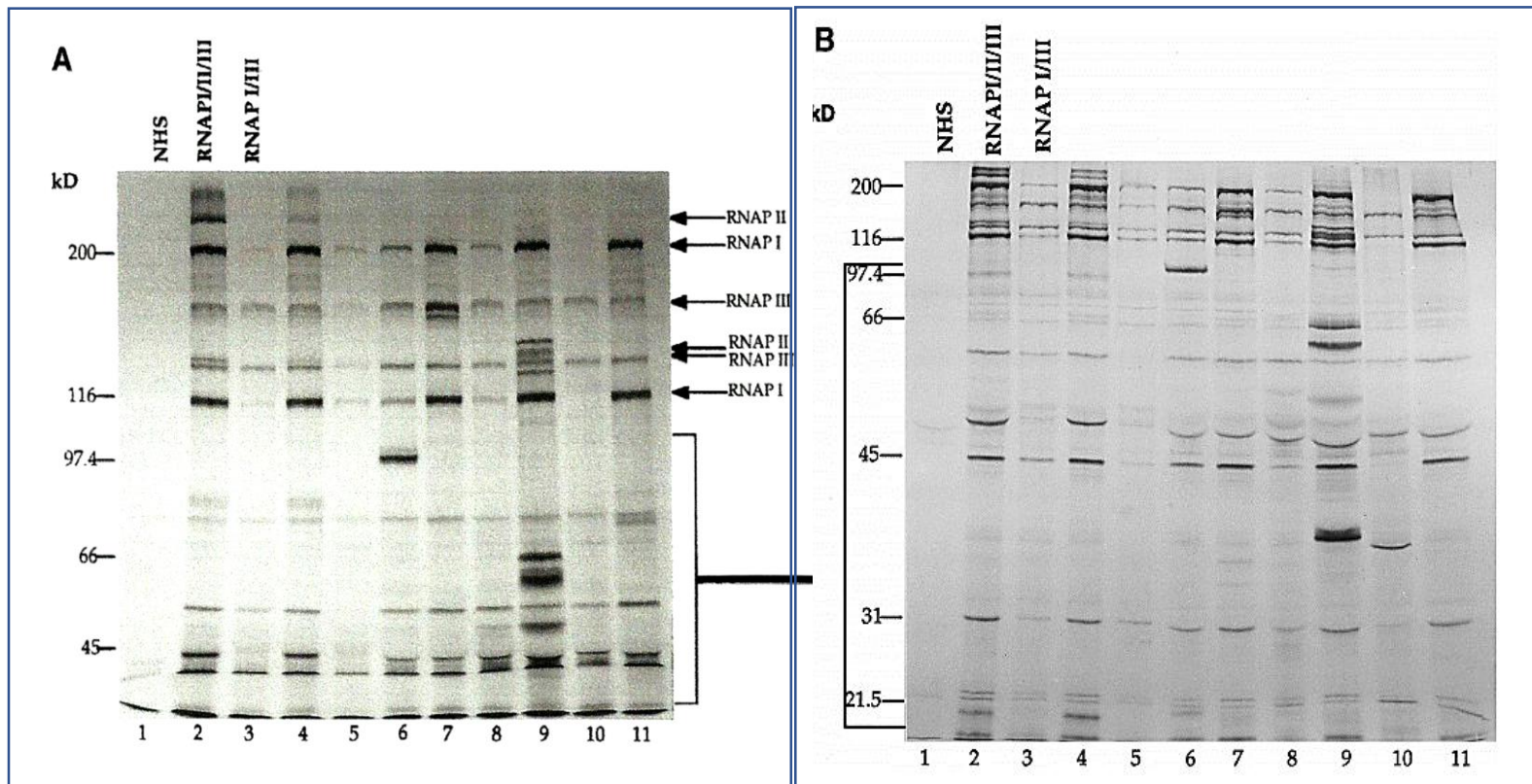


# ANTIBODIES TO RNA POLYMERASE III



# Analysis of autoantibodies against RNA polymerases using immunoaffinity-purified RNA polymerase I, II, and III antigen in an enzyme-linked immunosorbent assay

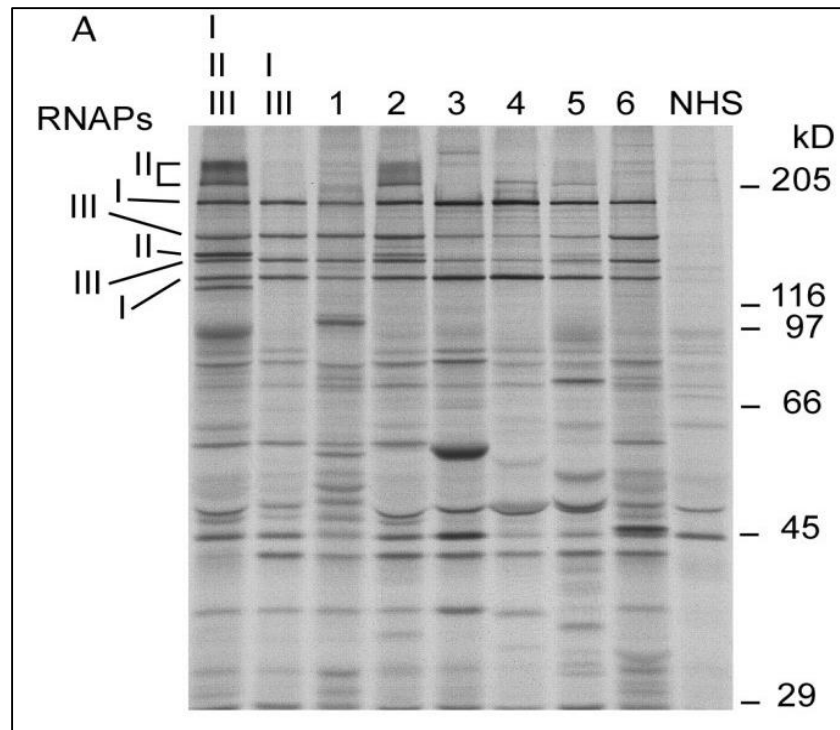
M Chang<sup>1</sup>, R J Wang, D T Yangco, G C Sharp, G R Komatireddy, R W Hoffman



# Autoantibodies to RNA polymerases recognize multiple subunits and demonstrate cross-reactivity with RNA polymerase complexes

M Kuwana <sup>1</sup>, Y Okano, J Kaburaki, T A Medsger Jr, T M Wright

**RNA POL I**    **194 + 126**  
**RNA POL II**   **240/220 + 145**  
**RNA POL III**   **155 + 138**



Immunoprecipitation using

<sup>35</sup>S-methionine labeled K562 cell extract.

*Ceribelli A. Ar.Res.Ther. 2011*

## Autoantibodies to RNA polymerases recognize multiple subunits and demonstrate cross-reactivity with RNA polymerase complexes

M Kuwana<sup>1</sup>, Y Okano, J Kaburaki, T A Medsger Jr, T M Wright

**Table 1.** Immunoreactivity to individual proteins in RNA polymerase (RNAP) complexes, determined by immunoblotting using 32 anti-RNAP-positive systemic sclerosis patient sera\*

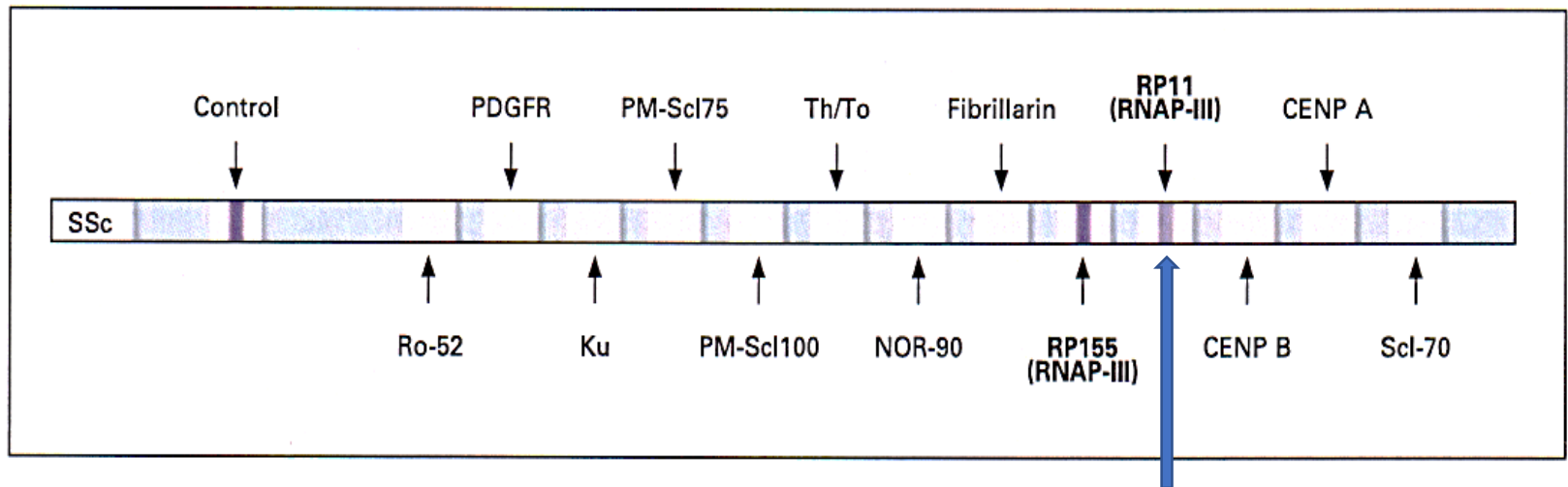
RNAP subunit protein	Anti-RNAP I/III/II (n = 5)	Anti-RNAP I/III (n = 23)	Anti-RNAP II alone (n = 4)
240-kd (IIo)	5 (100)†	0	4 (100)
220-kd (IIa)	5 (100)†	0	0
190-kd (Ia)	3 (60)	5 (22)	0
155-kd (IIIa)	5 (100)	23 (100)	0
145-kd (IIc)	2 (40)†	0	0
138-kd (IIIb)	4 (80)	13 (57)	0
126-kd (Ib)	2 (40)	6 (26)	0
84-kd‡	5 (100)	23 (100)	4 (100)
62-kd	5 (100)	21 (91)	0
43-kd	2 (40)	5 (22)	0
34-kd	3 (60)	6 (26)	0
32-kd	3 (60)	12 (52)	0
27-kd	5 (100)	16 (70)	0
23-kd	2 (40)†	0	0
21-kd	4 (80)†	0	0

# Line immunoassay using two RNA-Polymerase-III subunits for the sensitive and specific detection of Systemic sclerosis (SSc) specific autoantibodies

**A. Janssen, W. Meyer, T. Scheper, A. Rosemann,  
W. Stoecker, and W. Schlumberger**

Institute for Experimental Immunology, affiliated to EUROIMMUN AG, Luebeck, Germany

Congress Of Autoimmunity Slovenia May 2012



**RP11**

<b>Janssen A.</b>	<b>2010</b>	<b>n=129</b>	<b>RP155</b>	<b>9 (7.0%)</b>	<b>RP155 only : 1</b>
			<b>RP11</b>	<b>7 (5.4%)</b>	<b>RP11 only : 3</b>
			<b>RP155+RP11</b>	<b>10 (7.8%)</b>	
<b>Ott A.</b>	<b>2011</b>	<b>n=136</b>	<b>RP155</b>	<b>17 (12.5%)</b>	
			<b>RP11</b>	<b>14 (10.3%)</b>	
<b>Low A.H.L.</b>	<b>2012</b>	<b>n= 62</b>	<b>RP155</b>	<b>3 (4.4%)</b>	
			<b>RP11</b>	<b>1 (1.5%)</b>	
<b>Villalta D.</b>	<b>2012</b>	<b>n= 210</b>	<b>RP155</b>	<b>12 (5.7%)</b>	<b>RP155 only : 2</b>
			<b>RP11</b>	<b>11 (5.2%)</b>	<b>RP11 only : 1</b>
<b>Bonroy C.</b>	<b>2013</b>	<b>n= 145</b>	<b>RP155</b>	<b>14 (9.7%)</b>	
			<b>RP11</b>	<b>12 (8.3%)</b>	
<b>Wielocz E.</b>	<b>2014</b>	<b>n= 82</b>	<b>RP155</b>	<b>7 (8.0%)</b>	
			<b>RPP11</b>	<b>9 (6.5%)</b>	
<b>Sulau I.</b>	<b>2014</b>	<b>n= 31</b>	<b>RP155</b>	<b>2 (6.5%)</b>	
			<b>RP11</b>	<b>2 (6.5%)</b>	
<b>Alkema W</b>	<b>2021</b>	<b>n= 347</b>	<b>RP155</b>	<b>24 (8.3%)</b>	<b>RP155 only : 7</b>
				<b>23 (6.6%)</b>	<b>RP 11 only : 6</b>



<b>J.luc Charuel Paris</b>	<b>n=78</b>	<b>RP155 + RP11</b>	<b>48 (62%)</b>
		<b>RP155 restreints</b>	<b>18 (23%)</b>
		<b>RP11 restreints</b>	<b>12 (15%)</b>
<b>S. Dubucquoi</b>	<b>n=91</b>	<b>RP 155 + RP11</b>	<b>17 (18.7%)</b>
		<b>RP155 restreints</b>	<b>28 (30.7%)</b>
		<b>RP11 restreints</b>	<b>18 (19.7%)</b>
<b>E. Vinatier</b>	<b>n=49</b>	<b>RP155 + RP11</b>	<b>26 (44.8%)</b>
		<b>RP155 restreints</b>	<b>11 (18.9%)</b>
		<b>RP11 restreints</b>	<b>12 (20.6%)</b>
<b>N.Fabien</b>	<b>n=26</b>	<b>RP155 + RP11</b>	<b>14 (53.8%)</b>
		<b>RP155 restreints</b>	<b>9 (33.6%)</b>
		<b>RP11 restreints</b>	<b>3 (11,5%)</b>
<b>B.Nespola</b>	<b>n=47</b>	<b>PR155 + PR11</b>	<b>37 (78.7%)</b>
		<b>PR155 restreints</b>	<b>4 ( 8.5 %)</b>
		<b>PR11 restreints</b>	<b>6 (12.7%)</b>

# IF HEp2 PR11 monospécifiques

**Nicole Fabien**

**3**

1. 1280 moucheté + Nucléolaire
2. 320 moucheté
3. négatif

**Sylvain Dubucquoi**

**18**

1. 1280 Nucléolaire
2. 1280 Homogène
3. 320 Moucheté
4. 1280 Nucléolaire
5. 320 Nucléolaire
6. 1280 Centromère
7. 1280 Centromère
8. 1280 Moucheté
- 9-18 Négatif

**J.luc Charuel**

**12**

1. non compatible
2. non compatible
3. non compatible
4. non compatible



# PR11 monospécifiques

**Nicole Fabien**

- 1. Sclérodermie S. Cutanée Limitée**
- 2. PR + Raynaud**
- 3. Raynaud**

**Benoit Nespola**

- 1. Virose**
- 2. Drépanocytose**
- 3. Sharp**
- 4. Sclérodermie Systémique**
- 5. Sclérodermie Systémique**
- 6. Sclérodermie Systémique**