# A novel immunochromatographic strips assay for rapid and simple detection of systemic lupus erythematosus

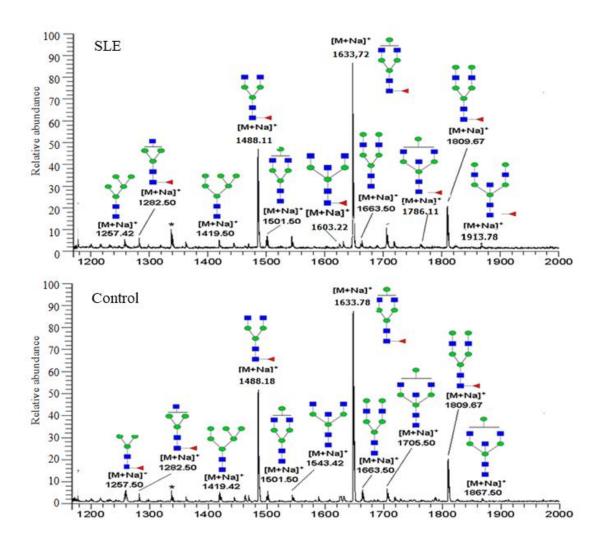
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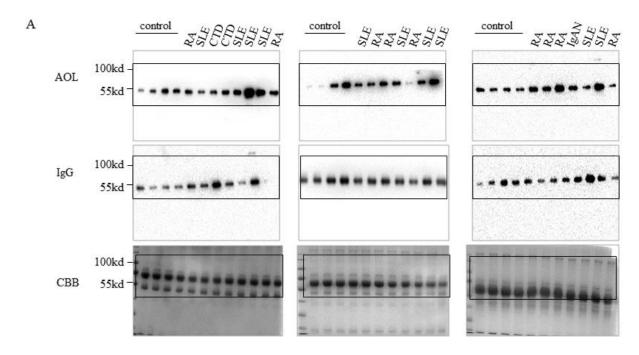
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- 1. Supplementary Figure 1: ESI-MS spectrometry of N-glycan structure on the IgG
- 2. Supplementary Figure 2: The full-length blots of Figure 2.
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- 6. Supplementary Table 1: Clinical characteristics of patients with autoimmune disease.
- 7. Supplementary Table 2: Clinical characteristics of patients with SLE

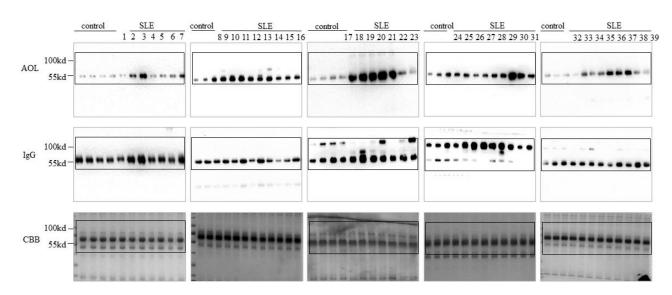


Supplementary Figure 1. ESI-MS spectrometry of N-glycan structure on the IgG in the sera of SLE patients and healthy controls. The serum samples (n = 3) were mixed and the N-glycan samples were injected via a Rheodyne loop with a colume of 2  $\mu$ l and subsequently brought into the electrospray ion source by a stream of 50% methanol (v/v) at a flow rate of 200  $\mu$ l/min. Triangle, fucose; Square, N-acetylglucosamine; circle, mannose.

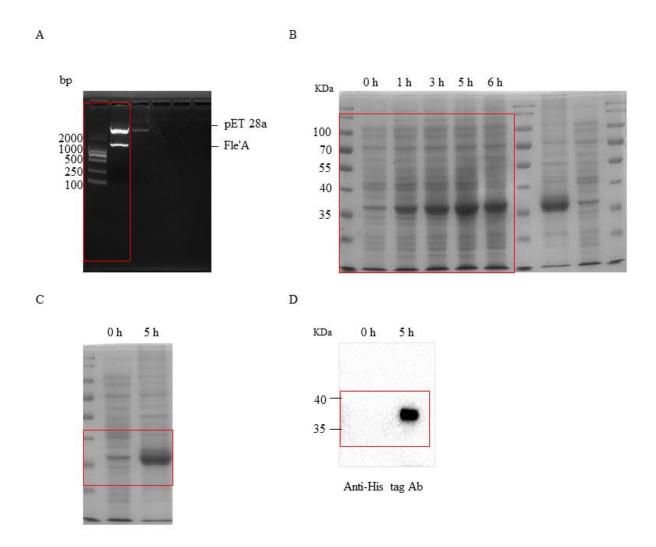


**Supplementary Figure 2:** The full-length gel and blots of Figure 2. (A) The full-length blots of Figure 2A in this manuscript. Boxed regions were cropped and shown as the figure.

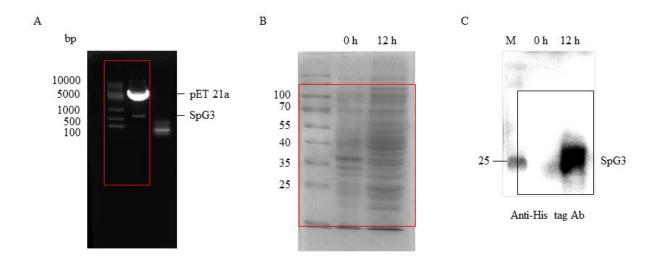
A



**Supplementary Figure 3:** The full-length gel and blots of Figure 3. (A) The full-length blots of Figure 3A in this manuscript. Boxed regions were cropped and shown as the figure.



**Supplementary Figure 4:** The full-length gel and blots of Figure 4. A) a full-length gel of Figure 4 in this manuscript; B-D) a full-length blots of Figure 4C-E in this manuscript. Boxed regions were cropped and shown as the figure.



**Supplementary Figure 5:** The full-length gel and blots of Figure 5. A) a full-length gel of Figure 5B in this manuscript; B,C) a full-length blots of Figure 5C,D in this manuscript. Boxed regions were cropped and shown as the figure.

Supplementary Table 1. Clinical characteristics of patients with autoimmune disease

Patients	Age/Sex/Ethnicity	ANA titer	Disease
1	62/F/Asian	1:100	RA
2	58/F/Asian	1:320	SLE
3	71/F/Asian		CTD
4	55/F/Asian		CTD
5	68/F/Asian	1:320-1000	SLE
6	35/M/Asian	1:320	SLE
7	65/F/Asian	1:100-320	SLE
8	47/F/Asian	1:100	RA
9	37/F/Asian	1:320	SLE
10	28/F/Asian	1:100	RA
11	66/F/Asian	1:100	RA
12	67/F/Asian	1:1000	SLE
13	28/F/Asian	1:3200	RA
14	61/F/Asian	1:320-1000	SLE
15	71/F/Asian	1:1000	SLE
16	61/M/Asian	1:320	RA
17	67/F/Asian	1:100	RA
18	66/F/Asian	1:320	RA
19	53/F/Asian	1:1000	IgAN
20	29/F/Asian	1:100	SLE
21	37/M/Asian	1:320	SLE
22	59/F/Asian	1:100	RA

Systemic lupus erythematosus, SLE; Rheumatoid arthritis, RA; Connective tissue disease, CTD; IgA nephropathy, IgAN.

Supplementary Table 2. Clinical characteristics of patients with SLE

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Patients	Age/Sex/Ethnicity		ANA titer	Disease		
1	58/F/Asian	3, 7, 9, 10, 11		SLE		
2	68/F/Asian	1, 5, 7, 9, 10, 11	1:320-1000	SLE		
3	35/M/Asian	1, 3, 4, 5, 9, 10, 11	1:320	SLE		
4	65/F/Asian	7, 9, 10, 11	1:100-320	SLE		
5	37/F/Asian	5, 6, 9, 11	1:320	SLE		
6	67/M/Asian	3, 5, 6, 9, 10, 11	1:1000	SLE		
7	61/F/Asian	1, 3, 4, 10, 11	1:320-1000	SLE		
8	71/F/Asian	5, 6, 7, 9, 10, 11	1:1000	SLE		
9	61/F/Asian	3, 7, 9, 10, 11	1:320	SLE		
10	67/F/Asian	1, 4, 5, 11	1:100	SLE		
11	66/F/Asian	1, 4, 7, 9, 10, 11	1:320	SLE		
12	29/F/Asian	1, 9, 10, 11	1:100	SLE		
13	37/M/Asian	7, 9, 10, 11	1:320	SLE		
14	53/F/Asian	1, 3, 5, 7, 9, 10, 11	1:3200	SLE		
15	53/F/Asian	1, 5, 6, 7, 9, 10, 11	1:3200	SLE		
16	54/F/Asian	3, 4, 10, 11	1:320-1000	SLE		
17	59/F/Asian	1, 6, 7, 9, 10, 11	1:1000	SLE		
18	68/F/Asian	3, 4, 9, 10, 11	1:100-320	SLE		
19	53/F/Asian	1, 7, 9, 10, 11	1:320-1000	SLE		
20	68/F/Asian	1, 4, 10, 11	1:100	SLE		
21	60/F/Asian	1, 5, 7, 9, 10, 11	1:3200	SLE		
22	18/F/Asian	3, 5, 10, 11	1:320	SLE		
23	37/M/Asian	3, 5, 6, 9, 10, 11	1:320-1000	SLE		
24	21/F/Asian	1, 3, 10, 11	1:100	SLE		
25	43/F/Asian	1, 3, 9, 10, 11	1:100	SLE		
26	39/F/Asian	1, 5, 9, 10, 11	1:1000	SLE		
27	54/F/Asian	5, 7, 9, 10, 11	1:320	SLE		
28	20/F/Asian	3, 7, 9, 10, 11	1:320	SLE		
29	39/F/Asian	1, 5, 6, 7, 9, 10, 11	1:3200	SLE		
30	23/F/Asian	1, 3, 4, 10, 11	1:100-320	SLE		
31	59/F/Asian	1, 5, 6, 9, 10, 11	1:1000	SLE		
32	46/F/Asian	1, 3, 5, 7, 9, 10, 11	1:3200	SLE		
33	36/F/Asian	3, 5, 6, 9, 10, 11	1:1000	SLE		
34	52/M/Asian	1, 7, 9, 10, 11	1:1000	SLE		
35	52/F/Asian	7, 9, 10, 11	1:1000	SLE		
36	52/F/Asian	1, 7, 9, 10, 11	1:320-1000	SLE		
37	29/F/Asian	3, 4, 9, 10, 11	1:320	SLE		
38	30/F/Asian	5, 6, 9, 11	1:100	SLE		
39	50/F/Asian	1, 6, 9, 10, 11	1:320	SLE		

<sup>1.</sup> Lupus malar rash; 2. Classic discoid rash; 3. Photosensitive; 4. Oral ulcers; 5. Synovitis; 6. Serositis; 7. Renal; 8. Neurologic; 9. Hemolytic anemia; 10. Immunologic; 11. ANA level above laboratory reference.