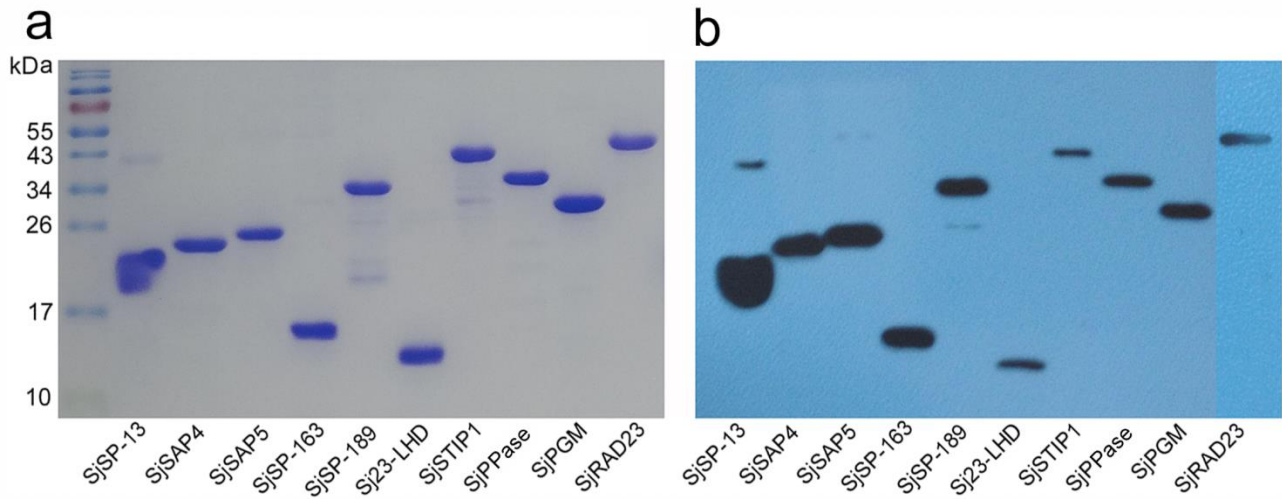
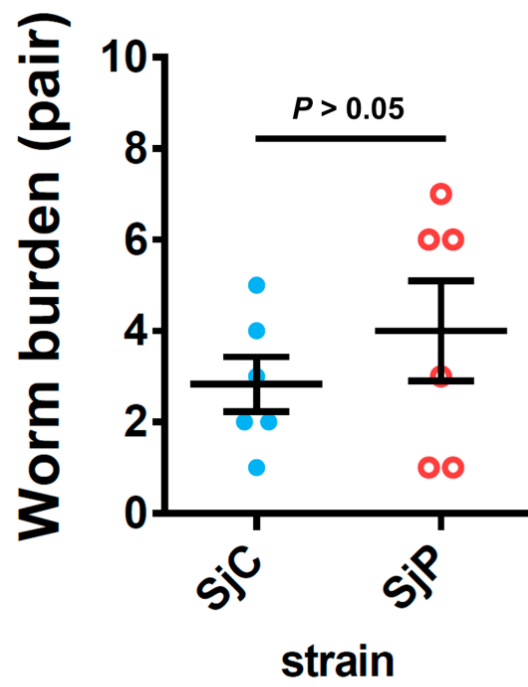


# Supplementary Figures and Tables

**Supplementary Fig. 1.** Purification of the 10 *S. japonicum* (SjP strain) antigen candidates. (a) Purified recombinant proteins were resolved in 12% (w/v) SDS-PAGE. (b). Detection of the ten recombinant proteins by Western blotting with an anti-his-tag antibody.



**Supplementary Fig. 2.** No significant difference was evident in the worm burden of the SjC- and SjP-infected BALB/c mice (Mann-Whitney test,  $P > 0.05$ ).



**Supplementary Table 1. Primers used in this study for molecular cloning.**

Target gene	Forward (5'-3')	Reverse(5'-3')
SjSP-13	AAGGATCCCTTGAAAATTCTGTGTCACC	CTGCTCGAGAATAGTGAATTGAACTAGAACTTC
SjSAP4	AAGGATCCGCAAACCACACTGAGTTGG	CTGCTCGAGTAATGGACACAACGTATTG
SjSAP5	AAGGATCCTCAACATTGAACAGTAATAATTTAC	CTGCTCGAGTGCAAAAGGATATTTCAAAAGG
SjSP-163	CTGGATCCCAAACTCTAGTATTTTCGTTT	ATAGTTTAGCGGCCGCGTAATATAATACAAAGATTAGTGTG
SjSP-189	CTGGATCCTTCAAGTTGGTCAAAGAAAGAAG	CTGCTCGAGTACCAATGTTATAATACTGAATAATCC
Sj23	CGGGATCCGTGTACAAGGATAAAAATCGATG	CTGCTCGAGGTTGCGTTTTAAGAATGCAC
SjTIP1	CTGAATTCGGCCAACATGAAGCAGAAG	ATAGTTTAGCGGCCGCCCCGGTACGAAATAAGACC
SjPPase	CGGGATCCTCGGTTGAACGTGGGACTT	CTGCTCGAGAATATTCGTATTACAAAAATGCC
SjPGM	AAGGATCCGCTCCCTACAAAATTGTATTC	CTGCTCGAGTTTCTTCTTCCTTGATTTCG
SjRAD23	AAGGATCCAAGGTTACTTTCAAAACACTG	CTGCTCGAGTACCATTTTCATCATCTAAAC

**Supplementary Table 2.** IgG titer against the 10 antigen candidates in SjP-infected BALB/c mice at 7 weeks p.i.

No.	SjSP-13	SjSAP4	SjSAP5	SjSP-163	SjSP-189	Sj23-LHD	SjSTIP1	SjPPase	SjGPM	SjRAD23	worm pairs	EPG
1	-	1:10 <sup>4</sup>	1:10 <sup>3</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	1:10 <sup>5</sup>	-	-	-	-	4	14043.9
2	-	1:10 <sup>4</sup>	1:10 <sup>4</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	1:10 <sup>5</sup>	1:10 <sup>2</sup>	-	-	1:10 <sup>2</sup>	4	16280.7
3	1:10 <sup>2</sup>	1:10 <sup>4</sup>	1:10 <sup>4</sup>	-	1:10 <sup>2</sup>	1:10 <sup>5</sup>	-	-	-	1:10 <sup>2</sup>	5	19333.3
4	-	1:10 <sup>3</sup>	1:10 <sup>3</sup>	-	-	1:10 <sup>5</sup>	-	-	-	-	3	19532.5
5	1:10 <sup>2</sup>	1:10 <sup>4</sup>	1:10 <sup>3</sup>	-	1:10 <sup>3</sup>	1:10 <sup>5</sup>	1:10 <sup>2</sup>	-	-	-	6	37006.8
6	1:10 <sup>2</sup>	1:10 <sup>4</sup>	1:10 <sup>4</sup>	1:10 <sup>2</sup>	1:10 <sup>3</sup>	1:10 <sup>6</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	8	32209.9
7	-	1:10 <sup>4</sup>	1:10 <sup>4</sup>	1:10 <sup>2</sup>	1:10 <sup>2</sup>	1:10 <sup>5</sup>	-	-	-	1:10 <sup>2</sup>	8	31992.0
8	1:10 <sup>2</sup>	1:10 <sup>4</sup>	1:10 <sup>4</sup>	-	1:10 <sup>2</sup>	1:10 <sup>5</sup>	1:10 <sup>2</sup>	-	1:10 <sup>2</sup>	1:10 <sup>3</sup>	10	42913.2
9	-	1:10 <sup>3</sup>	1:10 <sup>4</sup>	-	1:10 <sup>2</sup>	1:10 <sup>5</sup>	-	-	-	-	6	17361.7
10	1:10 <sup>2</sup>	1:10 <sup>4</sup>	1:10 <sup>3</sup>	1:10 <sup>2</sup>	1:10 <sup>3</sup>	1:10 <sup>5</sup>	-	-	1:10 <sup>2</sup>	1:10 <sup>2</sup>	9	36541.3

"-": negative at serum dilution of 1:10<sup>2</sup>

EPG: eggs per gram of faeces.

**Supplementary Table 3.** ddPCR positivity rate for stool and serum samples from the second patient cohort

Total number of samples tested (n)	Number of ddPCR positives (%)	
	KK-Positive (n=108)	KK-negative (n=304)
Stool (412)	106 (98.15)	201 (66.12)
Serum (412)	102 (94.44)	175 (57.57)