

Table S1. Oligonucleotide primers used for the construction of the recombinant plasmids encoding chimeric antigens.

<i>T. Gondii</i> Gene(s)	Primer Name	Primer Sequence	Underlined Sequence	Template for Amplification
pET30/SAG2-GRA1-ROP1_L [14]				
<i>sag2</i>	S21 (forward)	5'-GACAGCACAGATCTGACGCCAGCGCCCATTG-3'	<u>BglIII</u> and fragment of <i>sag2</i>	pUET1/SAG2
	S22 (reverse)	5'-GTTGTCGCGCCCTTCCTGAGAGACACAGG-3'	fragments of <i>gra1</i> and <i>sag2</i>	
<i>gra1</i>	G11 (forward)	5'-CCTGTGTCTCTCACGGAAGGCGGCGACAAC-3'	fragments of <i>sag2</i> and <i>gra1</i>	pUET1/GRA1
	G12 (reverse)	5'-CGGGCCTCTGACAGGCTCTCTCTCTCTG-3'	fragments of <i>rop1</i> and <i>gra1</i>	
<i>rop1</i>	R11 (forward)	5'-CAGGAGAGAGAGAGCCTGTCAGAGGCCCG-3'	fragments of <i>gra1</i> and <i>rop1</i>	pUET1/ROP1
	R12 (reverse)	5'-CGGCTCCGATATCGCTTGCGATCCATCATCTG-3'	<u>EcoRV</u> and fragment of <i>rop1</i>	
<i>sag2/gra1</i>	S21 (forward)	same as above	same as above	
	G12 (reverse)	same as above	same as above	<i>pre-sag2/gra1</i>
<i>sag2/gra1/rop1</i>	S21 (forward)	same as above	same as above	
	R12 (reverse)	same as above	same as above	<i>pre-sag2/gra1/rop1</i>
pET30/SAG1_L-MIC1-MAG1 [13]				
(PCR product was inserted into the <i>BglIII</i> and <i>BsmI</i> sites of the pUET1/MIC1-MAG1 [18]. Next the gene <i>sag1-mic1-mag1</i> was sub-cloned into the pET30 Ek/LIC using <i>BglIII</i> and <i>HindIII</i> .)				
<i>sag1</i>	S11 (forward)	5'-CAGCCCAGATCTAGATCCCCCTCTTGTGCG-3'	<u>BglIII</u> and fragment of <i>sag1</i>	pUET1/SAG1
	S12 (reverse)	5'-GAATGAGAATGCGACCGACGCCGATTTGCTGAC-3'	<u>BsmI</u> and fragments of <i>mic1</i> and <i>sag1</i>	
pET30/GRA1-GRA2-GRA6 [13]				
<i>gra1</i>	G11 (forward)	5'-GACAGCACAGATCTGGAAGGCGGCGACAAC-3'	<u>BglIII</u> and fragment of <i>gra1</i>	pUET1/GRA1
	G12 (reverse)	5'-GTGTATGTTACCTTTTCCTCTCTCTCTCTGTTAG-3'	fragments of <i>gra2</i> and <i>gra1</i>	
<i>gra2</i>	G23 (forward)	5'-CTAACAGGAGAGAGAGACGGAAAAAGGTGAACATACACC-3'	fragments of <i>gra1</i> and <i>gra2</i>	pUET1/GRA2
	G24 (reverse)	5'-CCTGCGACACGGACCTCGGAAAAAGTCTGG-3'	fragments of <i>gra6</i> and <i>gra2</i>	
<i>gra6</i>	G65 (forward)	5'-CCAGACTTTTCGAGGTCCGTCTCGCAGC-3'	fragments of <i>gra2</i> and <i>gra6</i>	pUET1/GRA6
	G66 (reverse)	5'-CGGCGCCGATATCGCATAATCAAAACACATTACACG-3'	<u>EcoRV</u> and fragment of <i>gra6</i>	
<i>gra1/gra2</i>	G11 (forward)	same as above	same as above	
	G24 (reverse)	same as above	same as above	<i>pre-gra1/gra2</i>
<i>gra1/gra2/gra6</i>	G11 (forward)	same as above	same as above	
	G66 (reverse)	same as above	same as above	<i>pre-gra1/gra2/gra6</i>
pET30/SAG2-GRA1-ROP1_L-GRA2				
<i>gra2</i>	SGRG-For	5'-TGGATCGCAAGCGATGGGAAAAGGTGAACATACACCACC-3'	fragment of <i>gra2</i>	
	SGRG-Rev	5'-CAAGCTTGTGCGACGGTCTGCGAAAAAGTCTGGGACGGGCA-3'	fragment of <i>gra2</i>	pUET1/GRA2
pET30/SAG1_L-MIC1-MAG1-GRA2				
<i>gra2</i>	SMMG-For	5'-GGGATCTGGTAAGCTGGGAAAAGGTGAACATACACCACC-3'	fragment of <i>gra2</i>	
	SMMG-Rev	5'-GGTGGTGGTCTCGATCTGCGAAAAAGTCTG-3'	fragment of <i>gra2</i>	pUET1/GRA2

Table S2. GenBank Accession numbers of selected *T. gondii* genes and characteristics of constructed plasmids and resulting recombinant proteins.

Plasmid (size)	Amino acid residues	Protein characteristic	GeneBank Accession No.
pET30/SAG2-GRA1-ROP1 _L (7245 bp)	31-170 SAG2 26-190 GRA1 85-396 ROP1	677 aa Mw 72.21 kDa pI 5.18	M33572.1 (<i>sag2</i>) M26007.1 (<i>gra1</i>) M71274.1 (<i>rop1</i>)
pET30/SAG1 _L -MIC1-MAG1 (7152 bp)	49-311 SAG1 25-182 MIC1 30-202 MAG1	646 aa Mw 69.21 kDa pI 5.73	S76248.1 (<i>sag1</i>) Z71786.1 (<i>mic1</i>) U09029.1 (<i>mag1</i>)
pET30/GRA1-GRA2-GRA6 (6867 bp)	26-190 GRA1 51-185 GRA2 40-230 GRA6	551 aa Mw 59.09 kDa pI 5.23	M26007.1 (<i>gra1</i>) M99392.1 (<i>gra2</i>) L33814.1 (<i>gra6</i>)
pET30/SAG2-GRA1-ROP1 _L -GRA2 (7632 bp)	31-170 SAG2 26-190 GRA1 85-396 ROP1 51-185 GRA2	806 aa Mw 86.32 kDa pI 5.56	M33572.1 (<i>sag2</i>) M26007.1 (<i>gra1</i>) M71274.1 (<i>rop1</i>) M99392.1 (<i>gra2</i>)
pET30/SAG1 _L -MIC1-MAG1-GRA2 (7548 bp)	49-311 SAG1 25-182 MIC1 30-202 MAG1 51-185 GRA2	778 aa Mw 83.61 kDa pI 6.02	S76248.1 (<i>sag1</i>) Z71786.1 (<i>mic1</i>) U09029.1 (<i>mag1</i>) M99392.1 (<i>gra2</i>)