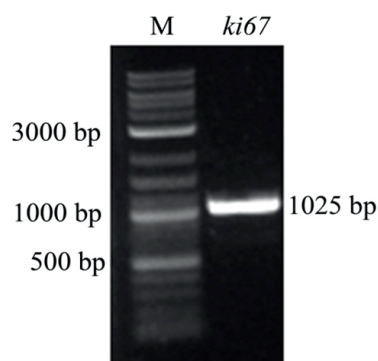


## Supplementary 1.

### Nucleotide sequence encoding designed antigen.

TTC CTG GCG CTG AGG AAA CTT ACA CCG TCT GCG GGC AAA GCG ATG  
 CTTACC CCG AAA CCG GCG GGT GGT GAT GAA AAA GAC ATT AAA GCG TTT  
 ATG GGT ACA CCG GTG CAG AAA CTG GAC CTG GCG GGT ACA CTG CCG GGC  
 AGC AAA CGT CAG CTT CAG ACA CCG AAA GAA AAA GCG CAG GCG CTT GAA  
 GAC CTG GCG GGC TTT AAA GAA CTG TTC CAG ACA CCG GGT CAC ACC GAA  
 GAACTG GTG GCG GCG GGT AAA ACC ACA AAA ATT CCG TGC GAC TCT CCG  
 CAGTCT GAC CCG GTG GAC ACC CCG ACA AGC ACA AAA CAG CGT CCG AAA  
 CGT AGT ATC AGG AAA GCG GAT GTT GAA GGT GAA CTG CTG GCG TGC AGG  
 AACCTT ATG CCG TCT GCG GGC AAA GCC ATG CAT ACC CCG AAA CCG TCT  
 GTTGGT GAA GAA AAA GAC ATC ATC ATT TTT GTG GGT ACC CCG GTG CAG  
 AAACCTG GAT CTG ACA GAA AAC CTG ACC GGC AGC AAA CGT CGT CCG CAG  
 ACCCCG AAA GAA GAA GCG CAG GCG CTG GAA GAC CTG ACA GGC TTT AAA  
 GAA CTG TTT CAG ACC CCG GGT CAT ACA GAA GAA GCG GTG GCG GCG GGC  
 AAA ACC ACA AAA ATG CCG TGC GAA TCT TCT CCG CCG GAA TCT GCG GAC  
 ACCCCG ACA TCC ACC CGT AGG CAG CCG AAA ACA CCG CTG GAA AAA AGG  
 GAC GTT CAG AAA GAA CTG TCT GCG CTG AAA AAA CTG ACA CAG ACA TCT  
 GGC GAA ACC ACA CAC ACA GAT AAA GTT CCG GGT GGT GAA GAT AAA AGC  
 ATC AAC GCG TTT AGG GAA ACA GCG AAA CAG AAA CTG GAC CCG GCG GCG  
 AGT GTT ACA GGT AGC AAA AGG CAC CCG AAA ACA AAG GAA AAG GCG CAG  
 CCG CTT GAA GAC CTG GCA GGC CTG AAA GAA CTG TTC CAA ACA CCG GTT  
 TGCACA GAC AAA CCG ACC ACA CAC GAA AAA ACA ACC AAA ATC GCG

## Supplementary 2.



Amplified fragment of the *ki-67* gene.

**Supplementary 3.****Results of LC-MS/MS for identification of Ki-67.**

No.	Database	Accession	Score	Mass	Description
1	SwissProt	KI67_HUMAN	10304	358474	Proliferation marker protein Ki-67 OS=Homo sapiens GN=MKI67 PE=1 SV=2
2	SwissProt	TRYP_PIG	172	24394	Trypsin OS=Sus scrofa PE=1 SV=1
3	SwissProt	K1C9_HUMAN	106	62027	Keratin, type I cytoskeletal 9 OS=Homo sapiens GN=KRT9 PE=1 SV=3
4	SwissProt	RHO_BUCAI	100	46859	Transcription termination factor Rho OS=Buchnera aphidicola subsp. Acyrthosiphon pisum (strain APS) GN=rho PE=3 SV=1
5	SwissProt	PRC2C_MOUSE	52	310703	Protein PRRC2C OS=Mus musculus GN=Prrc2c PE=1 SV=3
6	SwissProt	OP21B_ARATH	46	19440	Outer envelope pore protein 21B, chloroplastic OS=Arabidopsis thaliana GN=OEP21B PE=2 SV=1