Carbonetti, et al., Supplementary Materials

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Supplementary Table S1. 5'RACE and PCR primer sequences

PRIMER	SEQUENCE
Mm IgG CH1 R	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGCAGGGGCCAGTGGATAGAC
Mm IgG	GGGAAGTAGCCCTTGACCAGGC
Mm IgK CH1 R	GTCTCGTGGGCTCGGAGATGTGTATAAGAGACAGGGATACAGTTGGTGCAGC
Mm IgK	CCAGATGTTAACTGCTCACTGG
Mm IgL	CCTGGGTAGAAATCAGTGATCG
Mm IgL CH R	CAGGGTGACTGATGGCG
SMARTer IIa	TCGTCGGCAGCGTCAGATGTGTATAAGAGACAGAAGCAGTGGTATCAACGC
SMARTer step-out	GACAAGCAGTGGTATCAACGCAG
Gibson SMARTer fwd	ACCCTTGGTACCGCGGCCAAGCAGTGGTATCAACGC
Gibson IgG1 rev	TTTGGGCGGCGGAGCCAGGGGCCAGTGGATAGA
Gibson IgK rev	GGAGCTAGGGGGGAAGATGGATACAGTTGGTGCAGC

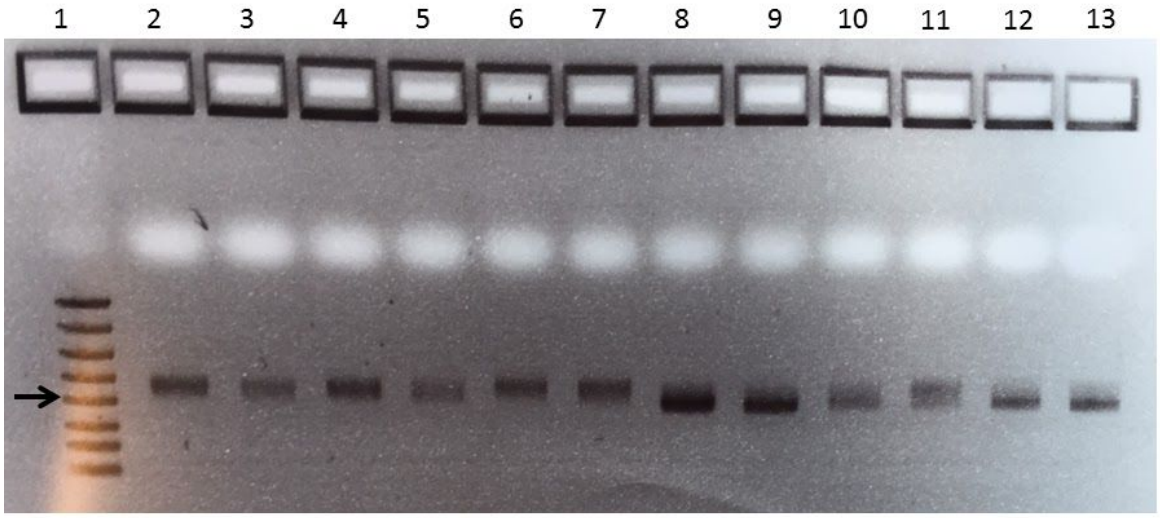
Supplementary Table S2 - Small-scale recombinant antibody purification yields

WELL NUMBER	AKBR	YIELD (µg) from a 10-mL culture
1C7	1	216
3B1	2	26.4
3F1	3	79.3
5C1	4	158.4
5D8	5	35.2
4A8	6	19.8

Supplementary Table S3. Binding affinities of AKBR mAbs

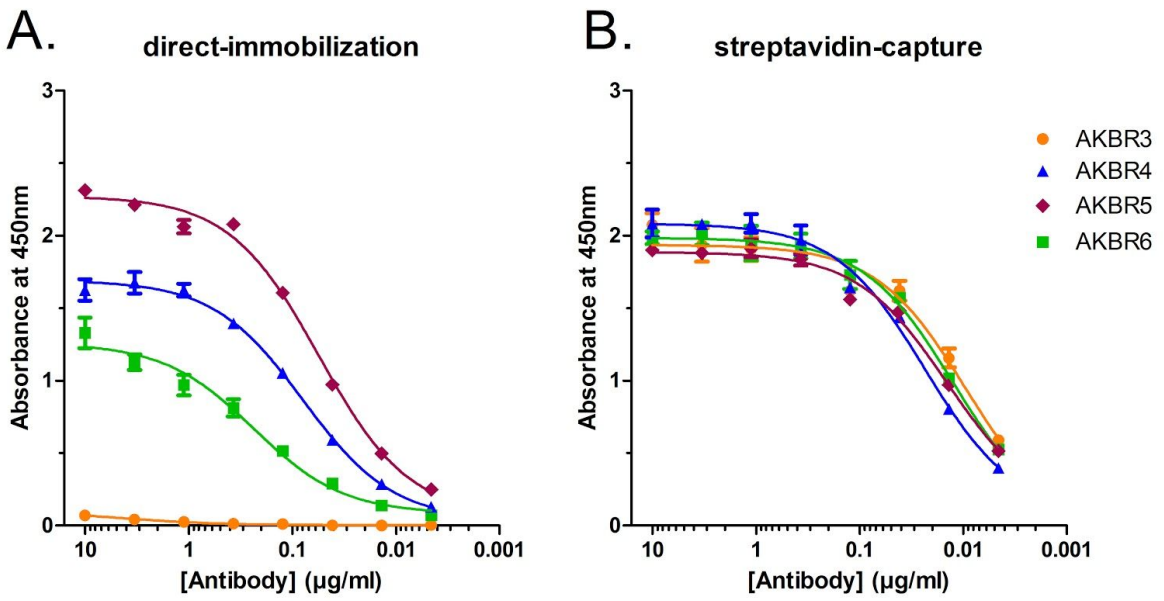
AKBR	K_D (M)	k_{on} (1/Ms)	k_{on} (Error)	k_{dis} (1/s)	k_{dis} (Error)
1	1.40E-07	4.22E+04	4.89E+03	5.92E-03	2.54E-04
2	2.64E-08	7.91E+04	2.07E+03	2.09E-03	3.47E-05
3	8.07E-08	5.23E+05	5.99E+04	4.23E-02	1.31E-03
4	9.72E-09	1.29E+05	4.24E+03	1.26E-03	3.70E-05
5	1.78E-08	3.53E+05	2.79E+04	6.30E-03	1.44E-04
6	9.73E-09	7.23E+04	3.02E+03	7.03E-04	4.50E-05

Supplementary Figure S1: RTPCR amplification of anti-PfTRAP heavy and light chains



Supplementary Figure S2. Gel-purified anti-PfTRAP amplicons. Lane 1), 100 bp - 4 kb DNA marker (Lonza, Walkersville, MD) lanes 2-7) AKBR-1-6 IgG heavy chain, lanes 8-13) AKBR1-6 IgK light chain. Arrow indicates 500bp on the DNA ladder.

Supplementary Figure S2: Comparison of direct and streptavidin capture ELISAs.



Supplementary Figure S3. PfTRAP was either directly immobilized on ELISA plates (A) or using the pre-immobilized streptavidin (B). For direct mobilization, PfTRAP was adsorbed to Immulon 2HB ELISA plates in 0.1M $NaHCO_3$ (pH 9.4) overnight at room temperature and then washed with PBS (pH 7.4), 0.02% Tween. The subsequent blocking, wash, primary sample application, secondary antibody steps were carried out as described in the materials and methods. Capture ELISAs were carried as described in the materials and methods.