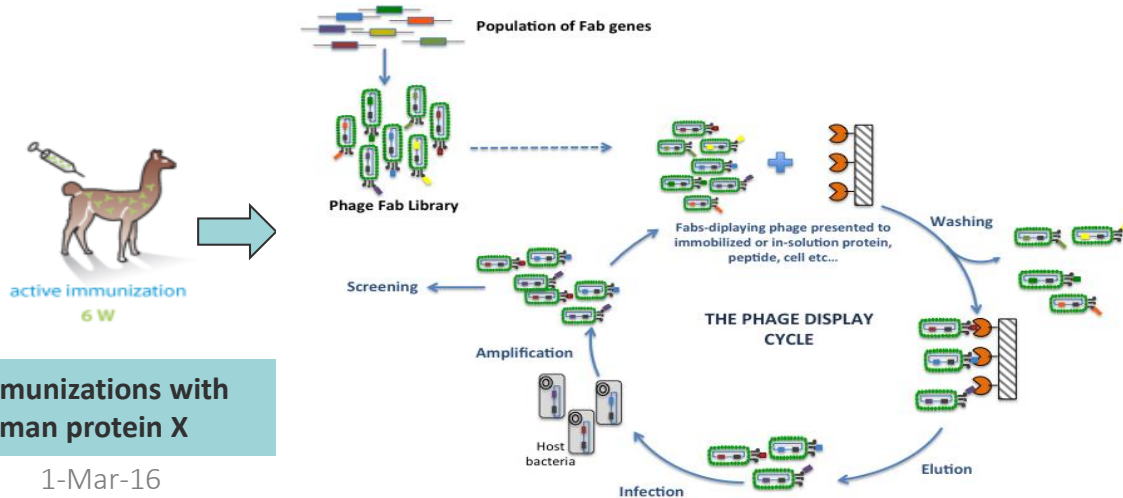


Case study V

Discovery of Fabs against a human target with no cross-reactivity to cyno

- Aim: To generate mAbs against human serum target X with no cross-reactivity to cynomolgus monkey serum protein X
 - Very conserved proteins: sequences with 95% similarity
- Technology: Llama immunizations + phage display counter selections

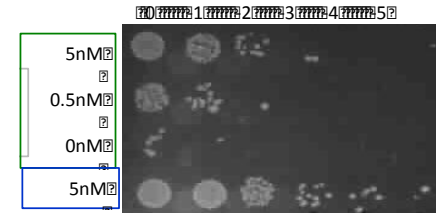


Immunizations with
human protein X

1-Mar-16

Counter selections:

- Immobilization/Capturing of human protein X
- Incubation of phage in presence of cyno serum

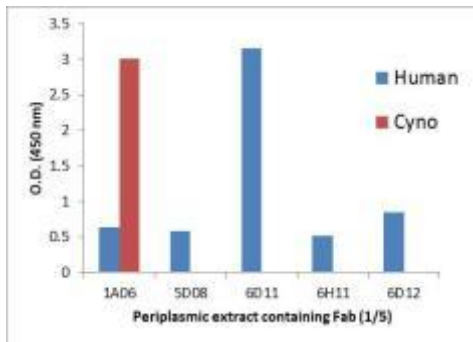


Titration of *E. coli* infected with phage from a Fab immune library selected after two rounds on human protein X in the presence or absence of cyno serum

Case study V

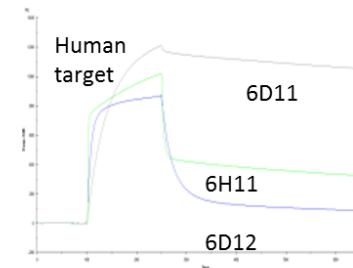
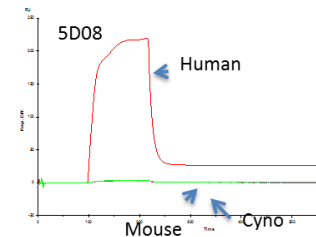
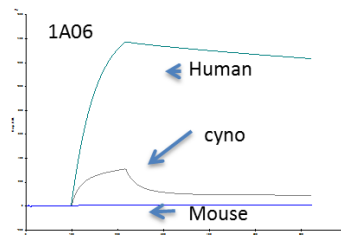
Discovery of Fabs against a human target with no cross-reactivity to cyno

- Aim: To generate mAbs against human serum target X with no cross-reactivity to cynomolgus monkey serum protein X
 - Very conserved proteins: sequences with 95% similarity
- Screening: ELISA & Sequencing & SPR



- 42 different VH sequences
- 20 different VL sequences
- 3 different Vκ sequences

- 11 different VHs families
- 17 orphan sequences



Case study V

Discovery of Fabs against a human target with no cross-reactivity to cyno

- Aim: To generate mAbs against human serum target X with no cross-reactivity to cynomolgus monkey serum protein X
 - Very conserved proteins: sequences with 95% similarity

Conclusions:

- Llama immunizations and Phage display-based counter selections allowed the isolation of anti human protein specific Fabs with no cross reactivity to cyno or mouse protein.
- The identified human target specific Fabs showed off-rates varying from 2.1×10^{-4} till $9.4 \times 10^{-3} \text{ sec}^{-1}$.
- Clones binding both human and cyno X but with 2 fold lower off rates for human X were also selected.



A diverse panel of 8 different human specific protein Fabs were delivered in 4 months