Title

A targeted boost-and-sort immunization strategy using *Escherichia coli* BamA identifies rare growth inhibitory antibodies

Authors

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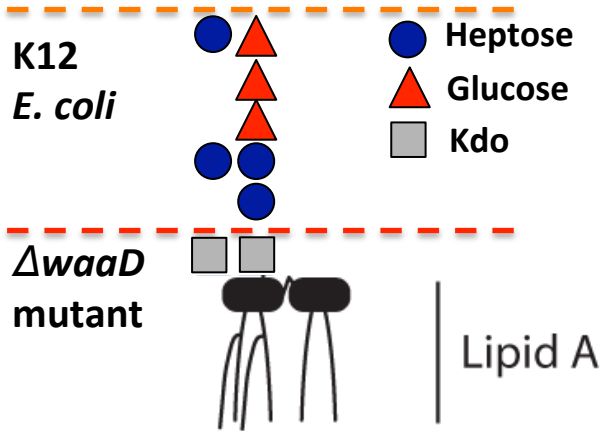
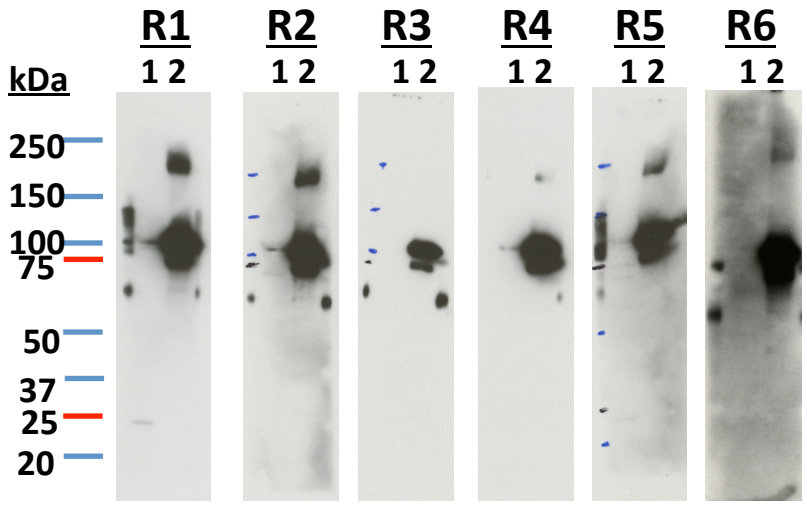
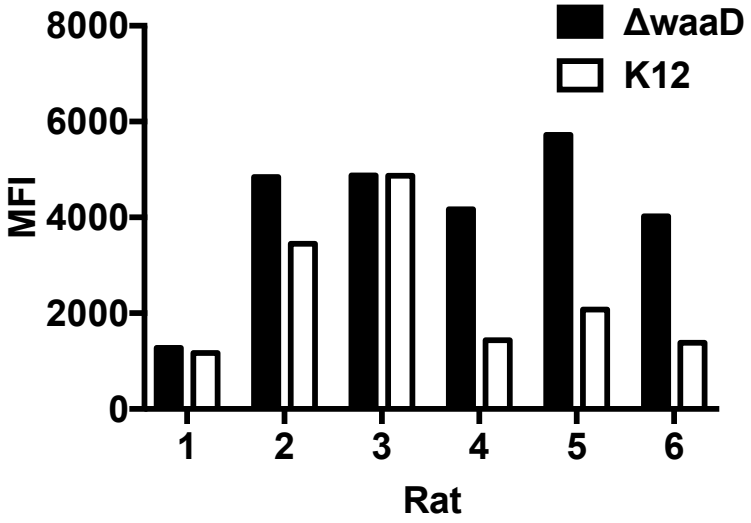


Supplemental Figure 1. Schematic of LPS structures on *waaD* and K12 strains. Diagram of LPS structure for both the K12 and waaD strains highlighting lack of elongated LPS in waaD (blue circle: heptose sugar; red triangle: glucose sugar; grey square: Kdo sugar).



Supplemental Figure 2. Western blots against purified BamA with pAbs from K12 immunizations. Western blot results with 10 ug/mL of purified pAbs from bleed 1 are shown. Lane 1 contains 100 ng of an irrelevant protein and lane 2 contains 100 ng of recombinant BamA. All samples were run on a single gel and transferred to a blot. The blot was divided into five parts and each parts was stained with a different purified pAb sample. Images for the full blot are shown.



Supplementary Figure 3. MFI values for purified pAbs from whole cell immunization. MFI values on either *ΔwaaD* (black box) or K12 (white box) with 40 ug/mL purified pAbs for each of the six rats.

Format	Advantage	Disadvantage
Purified protein (detergent)	High purity	• Detergent-specific conformation • Production
Purified protein (matrix)	• High purity • Modular choice of lipids	• Lipid-specific conformation • Production
Peptide	Ease of production	Hard to mimic native conformation
Membrane fraction	• Ease of production • Native format	High level of non-target Abs
Membrane vesicle	• Ease of production • Native format	• High level of non-target Abs • Low target amount
Whole cell	• Ease of production • Native format	• High level of non-target Abs • Low target amount
DNA	• Ease of production • Native format	• Low immune response • Low expression level

Supplementary Table 1. Comparison of different antigen formats for membrane proteins. Overview of advantages and disadvantages in using different antigen formats for antibody discovery.