Supplementary Figure legends

Supplementary Figure 1.
The complement fixing phenotype persists for several weeks (A). Rats were vaccinated with 10⁷ pfu of MRB LCMV GP and serum collected 37 days post-vaccination. Neutralization of MRB LCMV GP was assessed in vitro following incubation (1h; 37°C) of HI immune serum in the presence of dextrose gelatin veronal buffer (GVB++), with naïve rat serum as a source of complement. N= 3 rats; data is expressed as group means ±SD. In vitro neutralization of MRB LCMV GP (B) or MG1 (C) in rat blood, plasma or heat inactivated plasma. Rats were vaccinated with 10⁷ pfu intravenously two weeks prior to the terminal bleed and or depleted of complement with 35 U CVF the day prior to the bleed. Blood was anti-coagulated with Refludan to maintain complement activity[18]. One rat per immune/complement status was used and data is expressed as the technical replicates ±SD. (D) Validation of complement depletion with CVF treatment in vitro. Rat serum was incubated with CVF at a concentration of 10 U/mL and incubated at 37°C for the indicated times. Rat C3 as well as cleavage products are identified by a rabbit anti-rat C3 antibody and a HRP conjugated goat anti-rabbit antibody. (E, F) Viral neutralization mediated by antibody and complement is independent of the viral backbone. Rats were vaccinated with 10⁸ pfu of MG1 or MRB LCMV GP or 10⁷ pfu of MRB wt or VSVd51 or VSV LCMV GP and serum taken at 14 days post vaccination. Neutralization was assessed following incubation (1h; 37°C) of approximately 5x 10⁵ pfu of the corresponding virus with heat inactivated immune serum combined with GVB++, with naïve rat serum a source of complement or naïve rat serum pretreated with CVF to deplete C3. N=2 rats/group; data is expressed as group means ±SD. (G) Electron microscopy images of MRB LCMV GP particles undergoing destruction following incubation in MRB LCMV GP immune rat serum by complement and antibody. Arrows indicate disrupted particles, arrowheads indicate intact particles. Interior of particles indicated by arrows is stained with phosphotungstic acid, indicating that the integrity of the virion membrane has been compromised. Images were captured using a Hitachi H7100 Transmission Electron Microscope.

Supplementary Figure 2.
(A) Infection of 13762 MAT B III cells with MG1gfp or MRB LCMV GP at MOIs ranging from 0.003 to 3. Fluorescence or bright field images were captured 48 hours post infection. (B) Vero cells were infected with MRB LCMV GP or MG1 at an MOI of 0.03. Fold increase in titer over the input is shown ±SD.
Supplemental Figure 1.
A

MG1 GFP infection of 13762 MAT B III cells (images taken 48hpi)

MOI 3       MOI 0.3       MOI 0.03       MOI 0.003       Mock

Uninfected cells

MRB LCMV GP infection of 13762 MAT B III cells (images taken 48hpi)

MOI 3       MOI 0.3       MOI 0.03       MOI 0.003

B

MG1 and MRB LCMV GP replication in Vero cells

Supplemental Figure 2.