

**AgBR1 antibodies delay lethal *Aedes aegypti*-borne West Nile virus infection in mice**

**Ryuta Uraki <sup>1</sup>, Andrew K. Hastings <sup>1</sup>, Doug E. Brackney <sup>2</sup>, Philip M. Armstrong <sup>2</sup>, Erol Fikrig <sup>1,3\*</sup>**

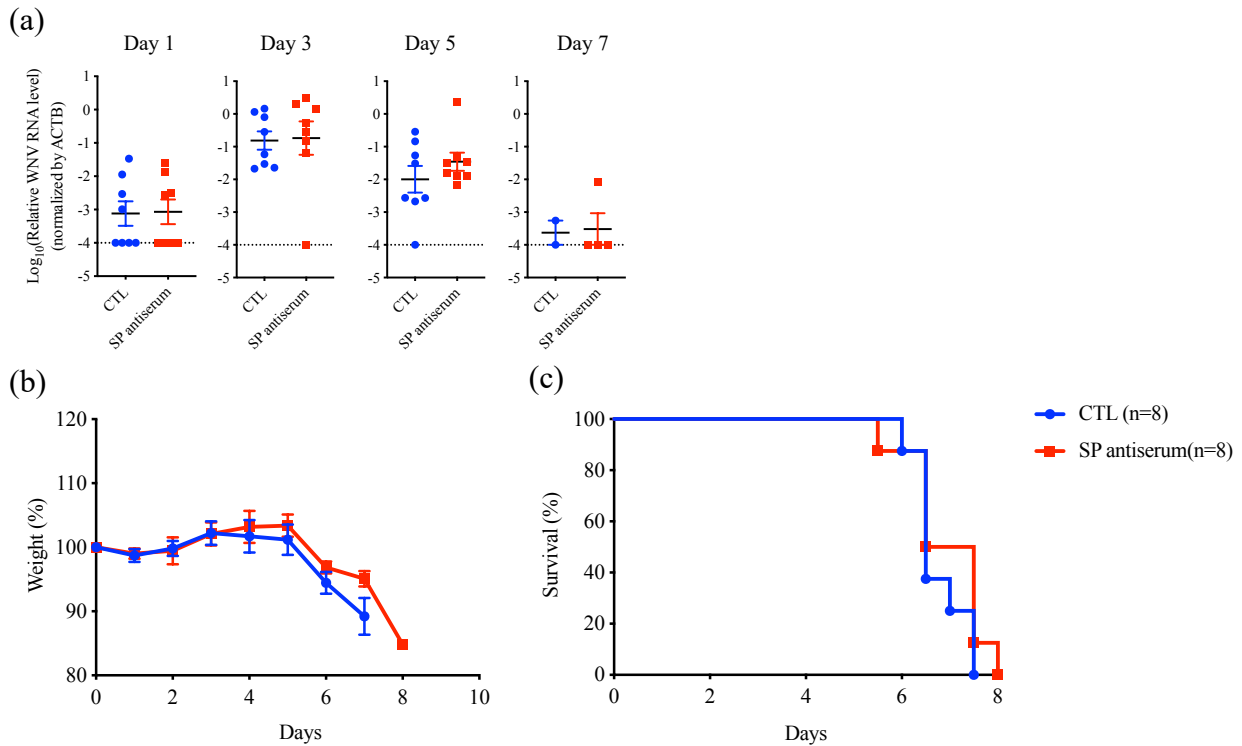
<sup>1</sup> Section of Infectious Diseases, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT, 06520, USA.

<sup>2</sup> Center for Vector Biology and Zoonotic Diseases, Department of Environmental Sciences, The Connecticut Agricultural Experiment Station, New Haven, 06511, CT, USA

<sup>3</sup> Howard Hughes Medical Institute, Chevy Chase, MD, 20815, USA.

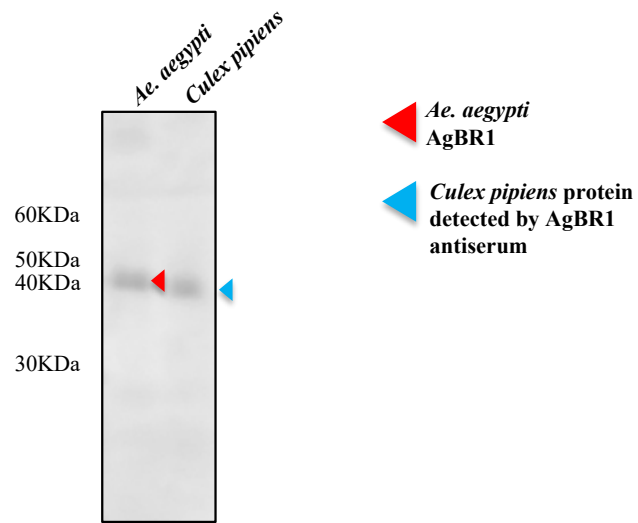
\*Correspondence: Erol Fikrig, Section of Infectious Diseases, Department of Internal Medicine. Yale University School of Medicine, The Anlyan Center for Medical Research and Education, 300 Cedar Street, New Haven, CT 06520-8031. Phone: (203) 785-4140, email: [erol.fikrig@yale.edu](mailto:erol.fikrig@yale.edu)

## Supplementary Information



### Supplementary Figure 1 Antiserum against SP was not protective against mosquito-borne West Nile virus infection.

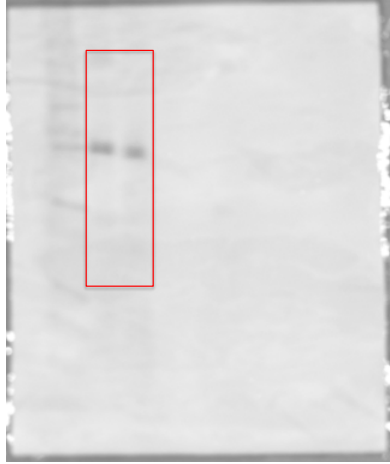
- (a) The virus levels in blood of mice treated with SP antiserum, fed by an infected mosquito. Blood was collected every other day for 7 days from mice fed on by WNV-infected mosquitoes and analyzed by qRT-PCR. WNV RNA levels were normalized to mouse  $\beta$  actin RNA levels. Mice immunized with naïve serum served as controls. Error bars represent mean  $\pm$  SEM. Each data point represents one mouse. Normalized viral RNA levels were analyzed using one-tailed Wilcoxon–Mann–Whitney test.
- (b) The weight of mice fed by an infected mosquito. Mice were monitored daily after WNV infection. Error bars represent mean  $\pm$  SEM. Weight at each time point were compared using one-tailed Wilcoxon–Mann–Whitney test.
- (c) Survival was assessed by a Gehan-Wilcoxon test (n=8/each group biologically independent samples pooled from two separate experiments).



**Supplementary Figure 2 Reactivity of AgBR1 serum against *Aedes aegypti* salivary glands and *Culex pipiens*.**

Immunoblot of *Ae. aegypti* and *Culex pipiens* salivary glands. Blot was probed with rabbit AgBR1 antiserum.

Supplementary Fig. 2



**Supplementary Figure 3 The uncropped original blot.**