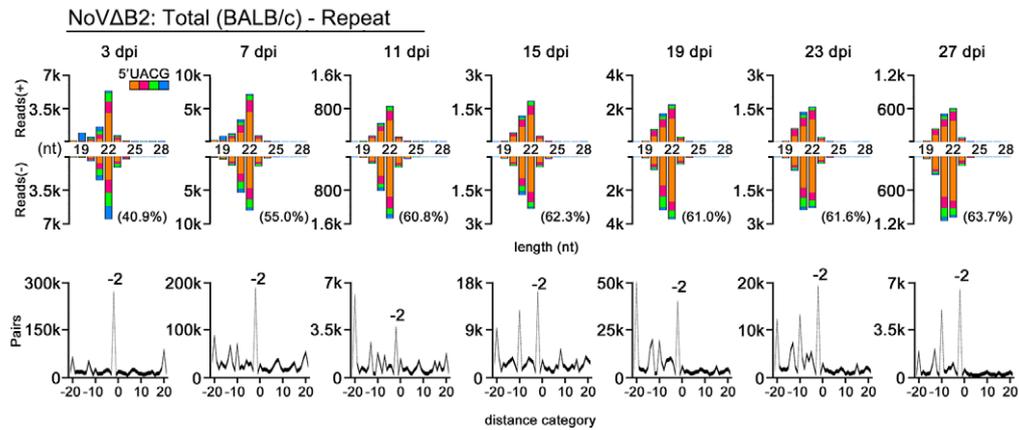
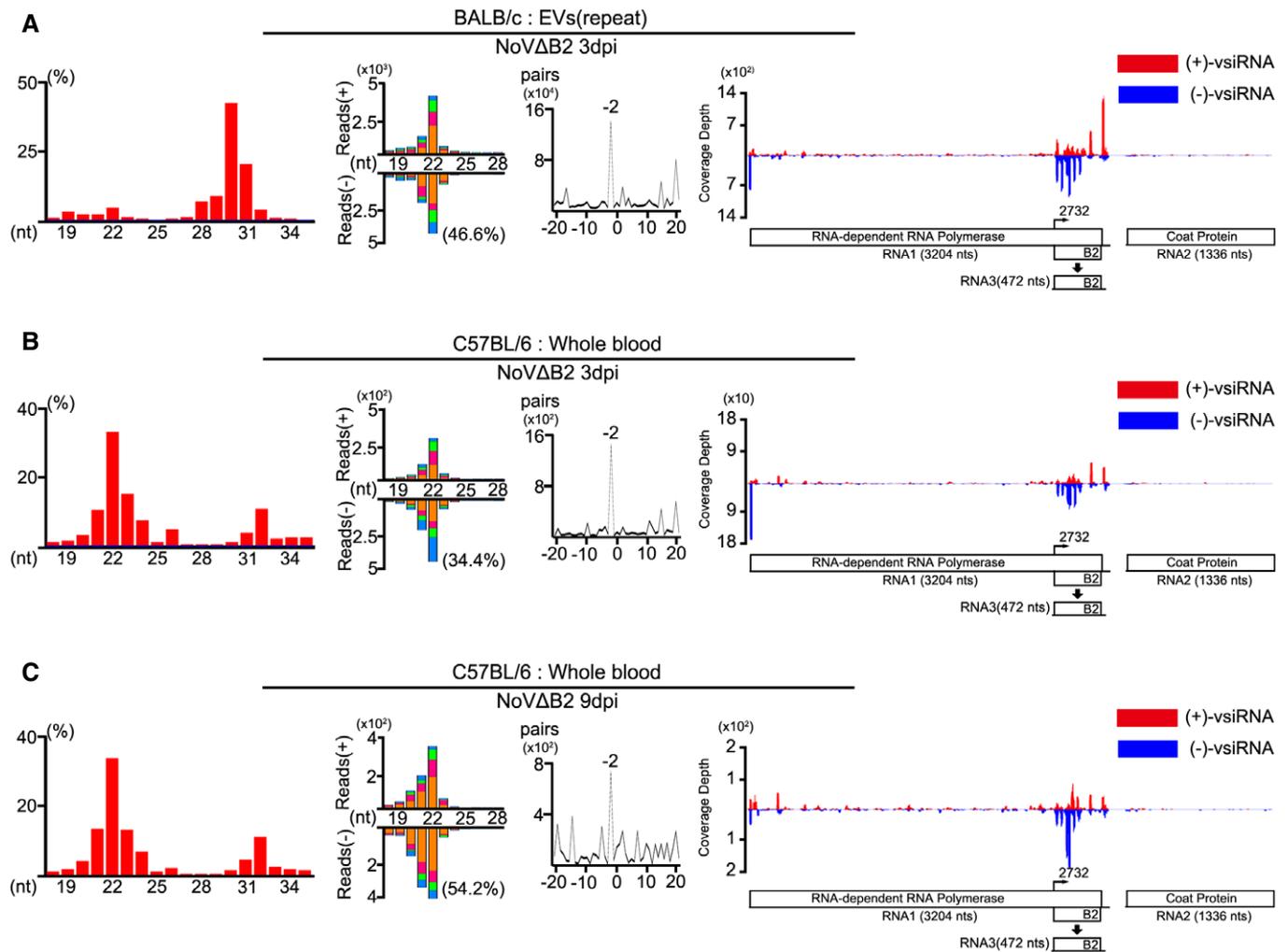


## Expanded View Figures



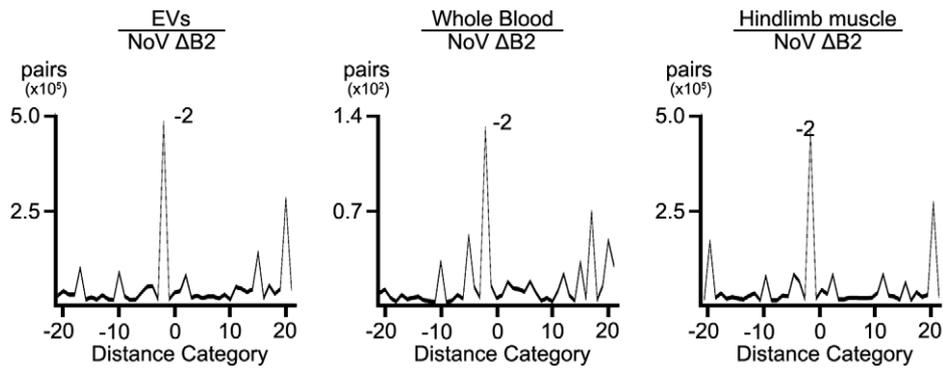
**Figure EV1. Long maintenance of vsRNAs in neonatal mice.**

Properties of viral siRNAs (per million mature miRNAs) cloned and sequenced from the time course series of NoVΔB2-infected BALB/c suckling mice (a repeat of Fig 1F). Size distribution, 5' terminal nucleotide, and duplexes by 22-nt vsRNAs are indicated. The 1 U% of 21- to 23-nt vsRNAs in each library is shown in parentheses.

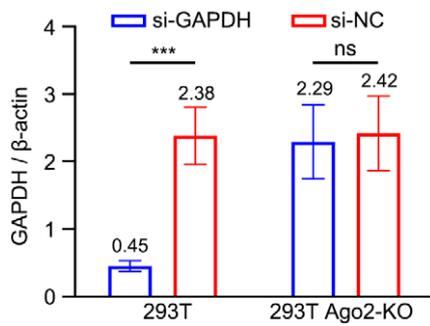


**Figure EV2. Properties of total small RNA reads and vsRNAs.**

A–C Properties of total small RNA reads and vsRNAs sequenced from the EVs in BALB/c suckling mice (A, a repeat of Fig 3), whole blood in C57BL/6 suckling mice infected with NoVΔB2 at 3 dpi (B) and 9 dpi (C). Length distribution of total 18- to 35-nt reads in each library, size distribution of virus-derived siRNAs, duplexes by 22-nt vsRNAs, and viral genomic coverage depth of each nucleotide position by 21- to 23-nt vsRNAs are presented as described in previous figures. Reads are shown as per million total mature miRNAs. 5' terminal nucleotide and 1 U % of 21- to 23-nt vsRNAs are indicated.

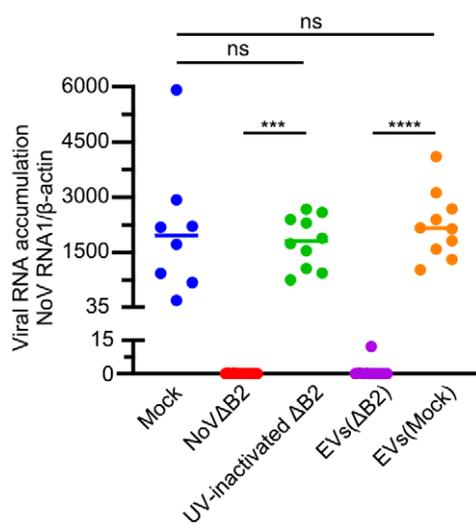


**Figure EV3. Duplex pattern of 22-nt vsRNAs in EVs, whole blood, and hindlimb muscle tissue from NoVΔB2 infected suckling mice.** Peaks at -2 nt and 20 nt indicated a typical duplex model by cleavage of endoribonuclease Dicer.



**Figure EV4. Functional assay of 293T Ago2-KO cells.**

293T and 293T Ago2-KO cells were transfected with siRNAs targeting GAPDH mRNA (si-GAPDH) or control siRNAs (si-NC). The accumulation levels of GAPDH mRNA were quantified by RT-qPCR. Normalization was done by β-actin mRNA. Three biological replicates were performed, and data are shown as mean ± SD. \*\*\* indicates  $P < 0.001$ , ns indicates no significant difference by Student's *t*-test.



**Figure EV5. Long-term protection by NoVΔB2 and EVs (ΔB2).**

BABL/c suckling mice were immunized with DMEM, live NoVΔB2, UV-inactivated NoVΔB2, or EVs from mock or NoVΔB2-immunized mice. At 21 days post immunization, the mice were challenged with WT NoV by intraperitoneal injection. These challenged mice were sacrificed at 3 dpi, and NoV RNA1 levels in hindlimb muscle tissue were determined by RT-qPCR. Normalization was done by β-actin mRNA. \*\*\* indicates  $P < 0.001$ , \*\*\*\* indicates  $P < 0.0001$ , ns indicates no significant difference by Student's *t*-test,  $n = 8-10$  per group. Data are shown as mean ± SD.