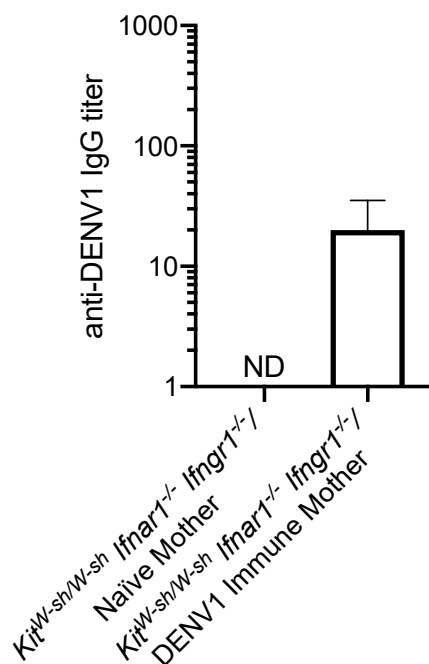
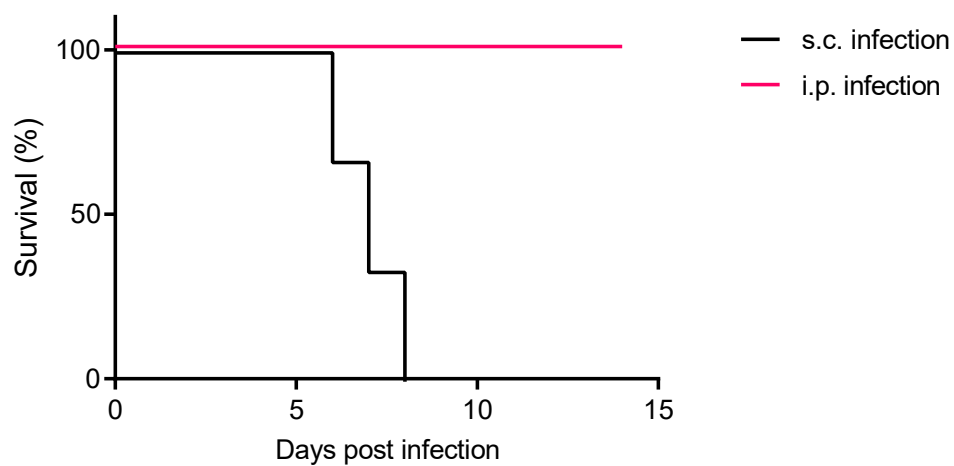


Supplementary Figure S1. Productive replication and clearance of DENV2 in *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{+/+}* and *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{-/-}* mice. 5–6 week-old mice ($n = 5–10$) were infected with 1×10^6 PFU of DENV2 (EDEN2 strain) by i.p. injection. Serum was collected on days 3 and day 10 post-infection and pooled before isolating viral RNA. Quantification of viral genome copies demonstrate productive replication in both *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{+/+}* and *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{-/-}* mice by day 3 post infection. While *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{+/+}* mice cleared infection completely by day 10, *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{-/-}* mice had very low level of infection by day 10. Data represent mean \pm SEM, ND: Not detected.



Supplementary Figure S2. Maternally acquired DENV1 IgG could be detected in *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{-/-}* mice. DENV1 specific IgG titre in serum collected from 5 weeks old *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{-/-}* mice born to naïve or DENV1 immunized mothers ($n = 4–5$). Data represent mean \pm SEM, ND: not detected.



Supplementary Figure S3. Subcutaneous DENV1 infection in *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{+/+}* mice was lethal. 5-6 wk old female *Kit^{W-sh/W-sh} Ifnar1^{-/-} Ifngr1^{+/+}* mice ($n = 5$) were infected with 1×10^5 PFU of DENV1 subcutaneously and monitored for 2wks for survival analysis.