A

B


D


Supplementary Figure 1. Lung bacterial burdens obtained for the different experimental infections used in this study.
C57BL/6 mice were infected by aerosol with a low dose of M. tuberculosis strain H37Rv (A) or HN878 (B). C3HeB/FeJ mice were infected intravenously with H37Rv strain (C). Gcnt1-/- mice were infected by aerosol with a low dose of M. tuberculosis strain HN878 (D). At the indicated time-points post-infection, the lungs of infected mice were collected and the bacteria burden determined by CFU enumeration. Represented is the Mean $\pm$ SEM for at least 5 mice per time point.

## Supplementary Figure 2

Core2-GIcNAcT

$\alpha 1,3 F u c T s$

$\alpha 2,3$ SialylTs


Supplementary Figure 2. Transcriptomic analysis of glycosyltransferaseencoding genes on C57BL/6 mice infected with H37Rv M. tuberculosis strain.
The expression of several glycosyltransferases involved on the SLeX biosynthetic pathways (Core 2-GIcNAcT, $\alpha 2,3$ SialyITs and $\alpha 1,3$ FucosylTs) was measured by realtime PCR in lungs of C57BL/6 mice infected via aerosol with a low dose of $M$. tuberculosis strain H37Rv on days 15, 30 and 90 post-infection. Non-infected animals $(\mathrm{NI})$ are shown as controls. Each dot represents one mouse of a total of 6-8 from 2 independent experiments. Statistical analysis was performed using one-way ANOVA with Tukey's test for multiple comparisons. ${ }^{*}, p<0.05 ;{ }^{* *}, p<0.01$.

