

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±SEM for at least 5 mice per time point.



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-GlcNAcT, α 2,3SialyITs and α 1,3FucosyITs) 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 (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.