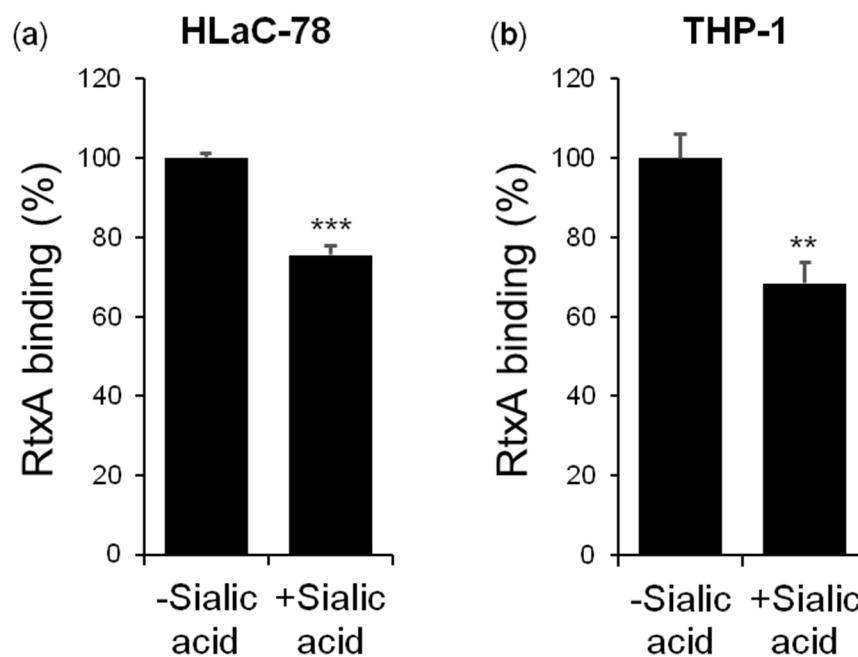
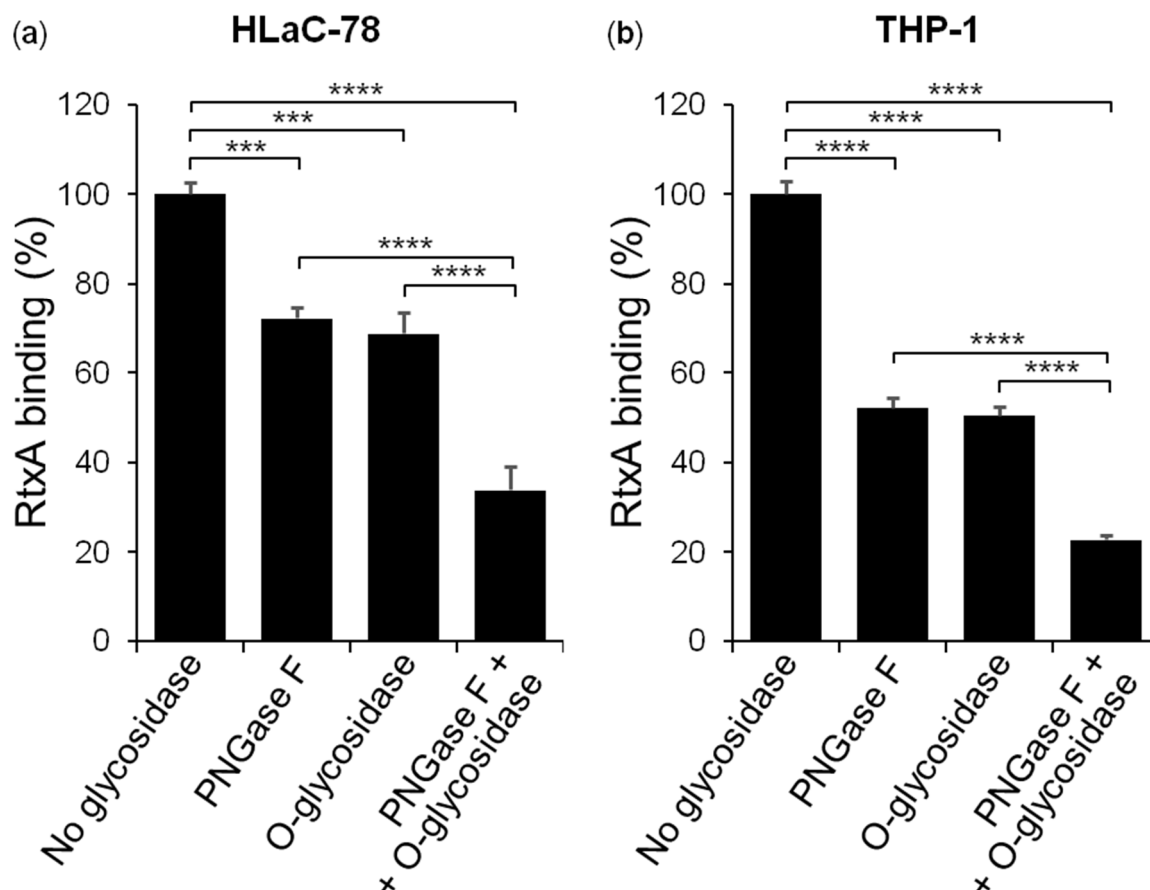


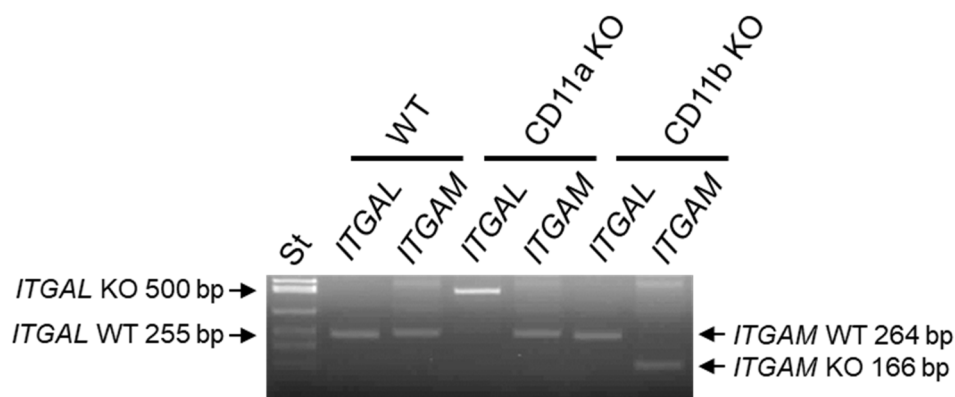
## Supporting Information: Binding of *Kingella kingae* RtxA Toxin Depends on Cell Surface Oligosaccharides, but Not on $\beta_2$ Integrins



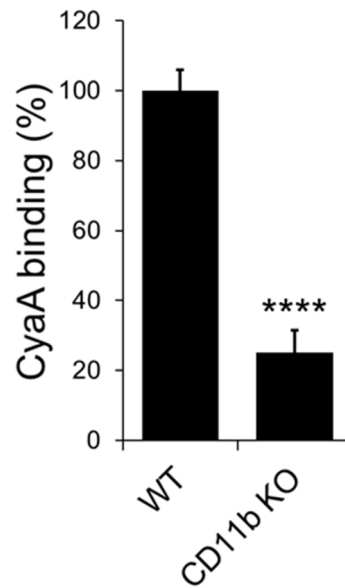
**Figure S1.** Binding of RtxA to cells is partially inhibited by free sialic acid. The purified and labeled RtxA-Dy495 toxin (2  $\mu\text{g}/\text{ml}$ ) was preincubated with 10 mM sialic acid or HBSS-Ca/Mg buffer alone for 1 min and then the solutions were added to HLaC-78 (a) or THP-1 (b) cells ( $1 \times 10^6/\text{ml}$ ). After 10 min at 4°C, the surface-bound RtxA-Dy495 was determined by flow cytometry and binding data were deduced from the MFI values and expressed as percentage of RtxA binding to sialic acid-untreated cells (taken as 100%). Each bar represents the mean value with SD of three independent experiments (\*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.001$ ; Student's t-test).



**Figure S2.** RtxA binding to cells deglycosylated with a combination of PNGase F and O-glycosidase was substantially decreased compared to cells deglycosylated individually with PNGase F or O-glycosidase. Human HLaC-78 (a) and THP-1 (b) cells were treated with PNGase F, O-glycosidase, a combination of PNGase F and O-glycosidase or buffer alone (no glycosidase) for 1 h at 37 °C. Then the cells ( $1 \times 10^6$ /ml) were incubated with 2  $\mu$ g/ml of the purified and labeled RtxA-Dy495 toxin for 10 min at 4 °C and the surface-bound RtxA-Dy495 was determined by flow cytometry. Binding data were deduced from the MFI values and expressed as percentage of RtxA binding to glycosidase-untreated cells (taken as 100%). Each bar represents the mean value with SD of three independent experiments (\*\*,  $p < 0.001$ ; \*\*\*\*,  $p < 0.0001$ ; ANOVA).



**Figure S3.** Genotyping of bone marrow-derived macrophages. DNA isolated from  $1 \times 10^6$  bone marrow-derived macrophages of WT, CD11a KO and CD11b KO mice was amplified by PCR with primer pairs specific for *ITGAL* (encoding CD11a) and *ITGAM* (encoding CD11b) alleles. The product size of *ITGAL* and *ITGAM* WT alleles is 255 bp and 264 bp, respectively, of *ITGAL* KO allele is 500 bp, and of *ITGAM* KO allele is 166 bp.



**Figure S4.** Bone marrow-derived macrophages of CD11b KO mice bind substantially lower amounts of CyaA than macrophages of WT mice. CD11b KO and WT macrophages ( $1 \times 10^6$ /ml) were incubated with  $5 \mu\text{g/ml}$  of the purified and Dy647-labeled CyaA toxoid (CyaA-AC, unable to convert ATP to cAMP) for 30 min at  $4^\circ\text{C}$  and analyzed by flow cytometry. Binding data were deduced from the MFI values and expressed as percentage of CyaA binding to WT macrophages (taken as 100%). Each bar represents the mean value with SD of at least five independent experiments (\*\*\*\*,  $p$ -value  $< 0.0001$ ; Student's  $t$ -test).