



Supplementary Figure 3. Correlation between reduction of gangliosides in *Npc1*^{-/-} cerebral cortex and evidence of stable interaction with different CDs. Each XY coordinate shows the average reduction in mol% of that ganglioside obtained compared to untreated mouse values (Y) (data from Fig 3) versus the binding constant obtained (X) (data from Table 2) with the same CD. For analysis, Ks that could not be determined due to undetectable interaction were given a value of zero. (A) Analysis of GM2 showed evidence of correlation (Pearson coefficient $r = -0.9743$, two-tailed $p = 0.0002$). Hypothesizing a cause and effect relationship, a linear regression analysis was also performed ($r^2 = 0.9492$) yielding the solid best fit line shown along with 95% confidence band indicated by dotted lines ($p = 0.0002$). (B) The same analyses performed for GM3 data also suggest a statistically significant though weaker correlation ($r = -0.7687$, $p = 0.0434$) and the best fit regression line is shown plotted ($r^2 = 0.5909$, $p = 0.0434$).