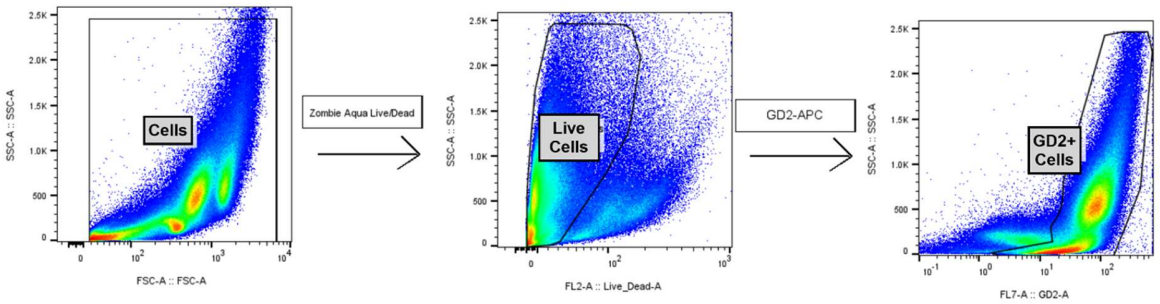
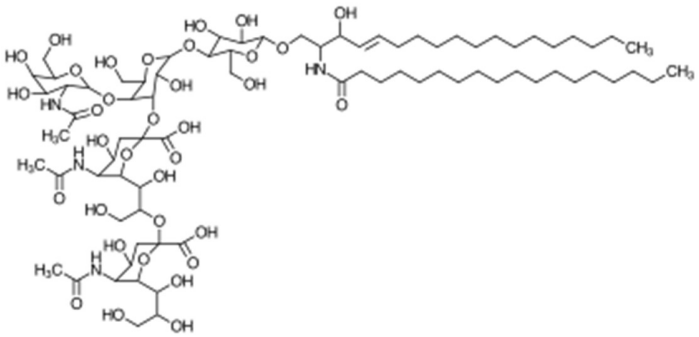
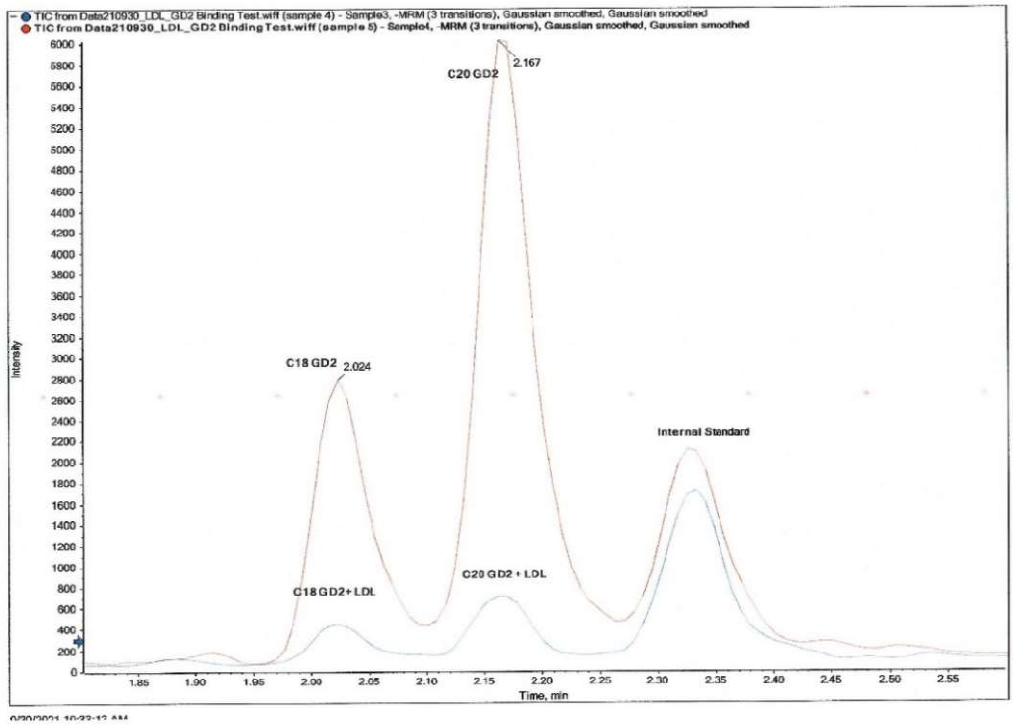


Supplemental Fig. 1: Gating strategies. To identify the desired populations, cells were isolated from debris while looking at forward scatter/side scatter plots. The Zombie Aqua stain was employed to identify live and dead cell populations. Cells negative for Zombie Aqua were selected as the live cell population. Among the live cells, populations that were positive for anti-GD2-APC were selected and utilized for calculation of mean fluorescence intensity.



Supplemental Fig. 2: GD2 Chemical Structure. GD2 is a disialoganglioside, consisting of a ceramide lipid domain and an extracellular glycan domain that consists of five carbohydrate residues, including two sialic acids.



LDL + GD2 (PBS) vs GD2 (PBS):

Treatment	**C18** peak area (conc. nM)	**C20** peak area (conc. nM)
LDL (PBS) + GD2	1300 (BLOQ)	2190 (5.56)
GD2 (PBS)	9670 (32.7)	21200 (69.4)

Supplemental Fig. 3: Liquid Chromatography/Tandem Mass Spectrometry Testing of GD2 Flowthrough. After passage through the Vivaspin 500 filter, the GD2-containing flowthrough was tested with liquid chromatography/tandem mass spectrometry to determine the proportions of free GD2 and LDL-complexed GD2. In the flowthrough, 15% of GD2 was complexed with LDL, which corresponds to 85% of the retentate remaining complexed with LDL.