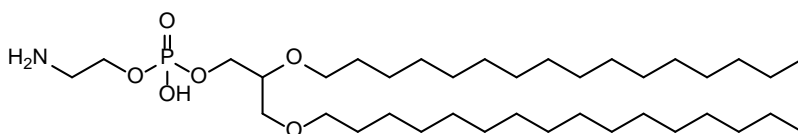


# Descriptions of lipid tags on glycan probes in the neoglycolipid (NGL)-based microarray system

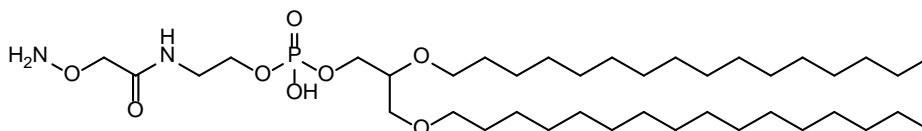
The oligosaccharide probes are all lipid-linked, neoglycolipids (NGLs) or glycosylceramides and are from the collection assembled in the course of research in the Glycosciences Laboratory. Unless otherwise specified the NGLs are prepared from reducing oligosaccharides by reductive amination with the amino lipid, 1,2-dihexadecyl-*sn*-glycero-3-phosphoethanolamine [(DHPE) (Chai et al., Methods Enzymol. 362, 160-195, 2003)]; AO, NGLs prepared from reducing oligosaccharides by oxime ligation with an aminooxy functionalized DHPE [(AOPE) (Liu et al., Chem. Biol. 14, 847–859, 2007)].

Other abbreviations: Cer, natural glycolipids with various ceramide moieties; CerA and CerB denote different natural ceramides; Cer36 and Cer42, synthetic glycolipids with ceramide having a total of 32 and 42 carbon atoms, respectively; C30, synthetic glycolipids with a lipid [2-(tetradecyl)hexadecanol] with 30 carbon atoms. Ser, Thr and Asn refer to NGLs prepared by amide coupling of glyco-amino acids (serine, threonine and asparagine, respectively) with DHPE. OX and OY refer to the 3- and 6-linked fragments, respectively, arising after mild periodate-oxidation of core GalNAcol of reductively released *O*-glycans; OX: -OCH<sub>2</sub>-CH(NHAc)-CH<sub>2</sub>OH-CH<sub>2</sub>-DHPE; OY: -OCH<sub>2</sub>-CH<sub>2</sub>-DHPE (Stoll et al. Eur. J. Biochem. 189, 499-507, 1990; Chai et al., Carbohydr. Res. 239, 107–115, 1993).

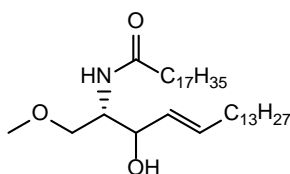
**DHPE**



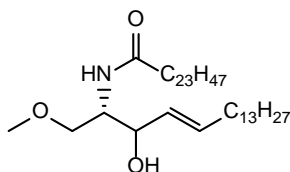
**AOPE**



**Cer36**



**Cer42**



**C30**

