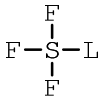
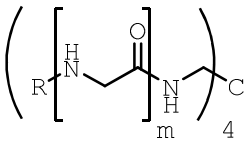
CLAIMS

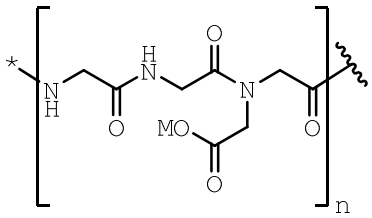
1) A **construct** of the structure:



where F is a ligand, L is a conjugated phosphatidylethanolamide and S is a tetraantennary spacer of the structure:



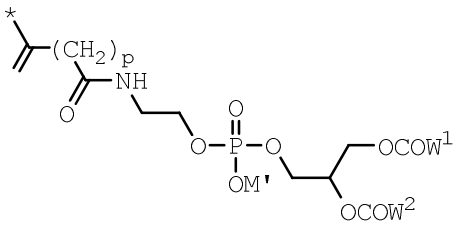
where m is the integer 1, 2 or 3 and R is of the structure:



where M is a monovalent cation or substituent, n is the integer 2, 3, 4, 5, 6 or 7, and * is the point of attachment of F or L.

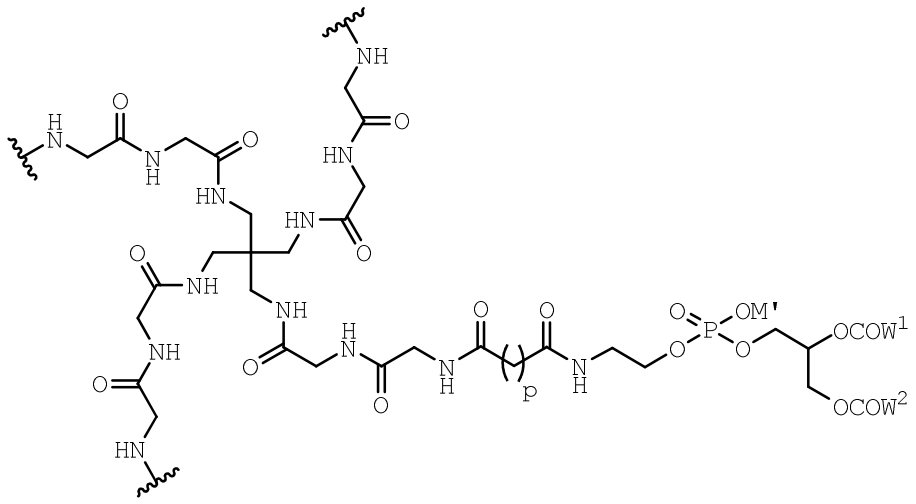
2) The construct of claim 1 where M is H^+ and n is the integer 5.

3) The construct of claim 2 where L is a conjugated phosphatidylethanolamide of the structure:

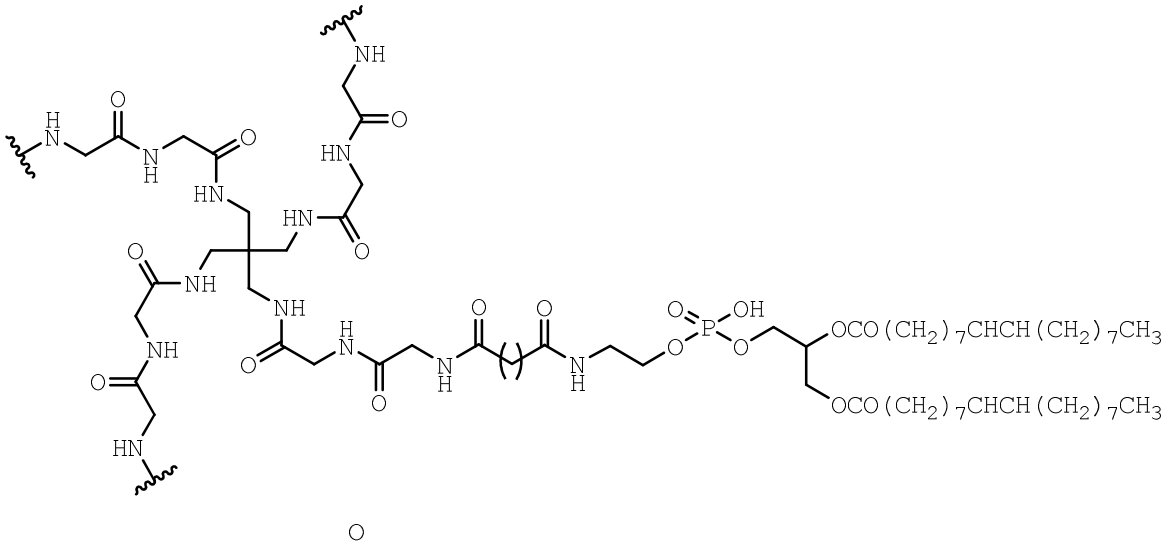


where M' is a monovalent cation, p is the integer 3, 4 or 5, W^1 and W^2 are independently selected from C_{16-20}-alkyl or mono- or di-unsaturated C_{16-20}-alkenyl groups and * is the point of attachment of S.

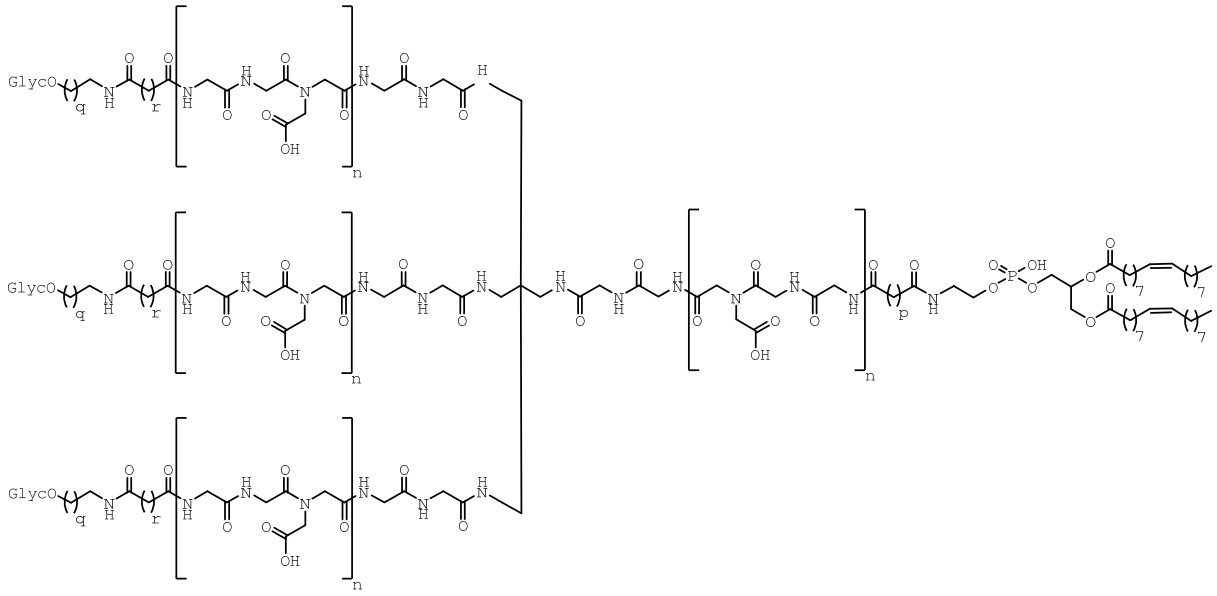
4) The construct of claim 3 where the multivalent ligand-lipid construct comprises the partial structure:



5) The construct of claim 4 where the construct comprises the partial structure:



6) The construct of claim 3 where F is an aminoalkylglycoside and the multivalent ligand-lipid construct is of the structure:



where Glyc is a glycan and q and r are integers independently selected from 1, 2, 3 and 4.

7) The construct of claim 6 where Glyc is a glycan selected from the group consisting of the group of mono-, di-, tri- and oligosaccharides: (Neu5Acα6Galβ4GlcNAcβ2Manα)$_2$3,6Manβ4GlcNAcβ4GlcNAcβ (YDS); Fucα2Galβ (H_{di}); Fucα2Galβ3(Fucα4)GlcNAcβ (Le^b); Fucα2Galβ3GlcNAcβ3Galβ4Glcβ (LNFP I); Fucα2Galβ4(Fucα3)GlcNAcβ (Le^y); Fucα2Galβ4GlcNAcβ (H2); Galα; Galβ1-3(Fucα1-3)GlcNAc;Galβ1-3(Fucα1-4)GlcNAcβ1-4GlcNAc;Galβ1-3GlcNAcβ1-4GlcNAc;Galβ1-3GlcNAc;Galβ1-4(Fucα1-3)GlcNAcβ1-4GlcNAc;Galβ1-4(Fucα1-3)GlcNAc;Galβ1-4GlcNAcβ1-4GlcNAc;Galβ1-4GlcNAc;Galα3(Fucα2)Galβ (B_{tri}); Galα3(Fucα2)Galβ3(Fucα4)GlcNAcβ (Ble^b); Galα3(Fucα2)Galβ3GalNAcα (B3); Galα3(Fucα2)Galβ3GalNAcβ (B4); Galα3(Fucα2)Galβ3GlcNAcβ (B1); Galα3(Fucα2)Galβ4(Fucα3)GlcNAcβ (Ble^y); Galα3(Fucα2)Galβ4GlcNAcβ (B2); Galα3Galβ4GlcNAcβ (Galili); Galα4Galβ4GlcNAcβ (P_1); Galα4Galβ4Glcβ (Gb3 (P^k)); Galα4GlcNAcβ (α-LN); GalNAcα3(Fucα2)Galβ (A_{tri}); GalNAcα3(Fucα2)Galβ3(Fucα4)GlcNAcβ (ALe^b); GalNAcα3(Fucα2)Galβ3GalNAcα (A3); GalNAcα3(Fucα2)Galβ3GalNAcβ (A4); GalNAcα3(Fucα2)Galβ3GlcNAcβ (A1); GalNAcα3(Fucα2)Galβ4(Fucα3)GlcNAcβ (ALe^y); GalNAcα3(Fucα2)Galβ4GlcNAcβ (A2); GalNAcα3GalNAcβ (Fs2); GalNAcα3GalNAcβ3Galα4Galβ4Glcβ (Fs5); GalNAcα3Galβ (A_{di}); GalNAcα3Galβ4GlcNAcβ; GalNAcβ; GalNAcβ3Galα4Galβ4Glcβ (P); $GalNH_2$α3(Fucα2)Galβ (AcqB); Galβ; Galβ3(Fucα4)GlcNAcβ (Le^a);

Galβ3GalNAcα (TF); Galβ3GalNAcβ4Galβ4Glcβ (GA1); Galβ4(Fucα3)GlcNAcβ (Le^x); Galβ4GlcNAcβ3Galβ4GlcNAcβ (i(LN_2)); Galβ4GlcNAcβ3Galβ4Glcβ (LNnT); Galβ4Glcβ (Lac); GlcAβ3[GlcNAcβ4GlcAβ3]$_n$GlcNAc-aminoalditol (hyaluronate); Manα6(Manα3)Manβ (Man_3); Neu5Acα3Galβ4GlcNAcβ (Neu5Ac3'LN); Neu5Acα3Galβ4Glcβ (Neu5Ac3'Lac); Neu5Acα6GalNAcαβ (SiaTn); Neu5Acα6Galβ4GlcNAcβ (Neu5Ac6'LN); Neu5Gcα3Galβ4GlcNAcβ (Neu5Gc3'LN); SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAβ2-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAc; SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-4Gal; SAα2-3Galβ1-3(Fucα1-4)GlcNAcβ1-4GlcNAc; SAα2-3Galβ1-3(Fucα1-4)GlcNAc; SAα2-3Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAc; SAα2-3Galβ1-3GlcNAcβ1-4GlcNAc; SAα2-3Galβ1-3GlcNAc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-4Gal; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-4GlcNAc; SAα2-3Galβ1-4(Fucα1-3)GlcNAc; SAα2-3Galβ1-4Glc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAc; SAα2-3Galβ1-4GlcNAcβ1-4GlcNAc; SAα2-3Galβ1-4GlcNAc; SAα2-6Galβ1-3(Fucα1-4(GlcNAc; SAα2-6Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAc; SAα2-6Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-3GlcNAcβ1-4Galβ1-4(Fucα1-3)GlcNAc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-

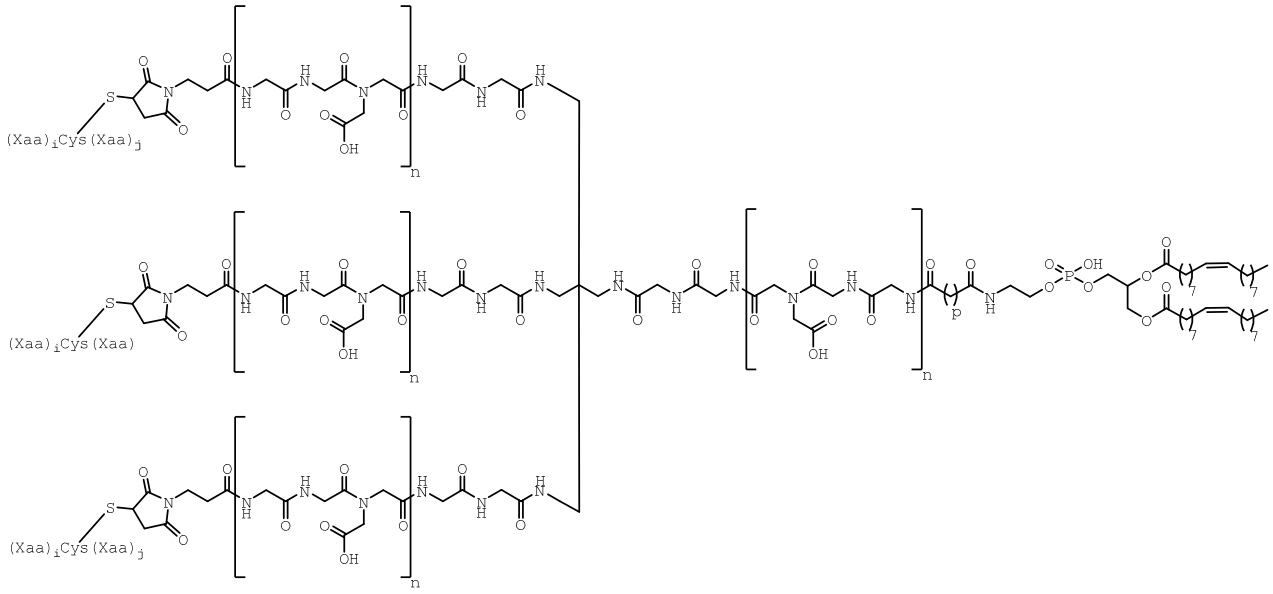
3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-4Glc; SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4(Fucα1-3)Glc; SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-4Glc; SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-4(Fucα1-3)GlcNAc; SAα2-6Galβ1-4GlcNAcβ1-4GlcNAc; SAα2-6Galβ1-4GlcNAc; SAα2-3Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAc; SAα2-3Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAc; SAα2-6Galβ1-4(Fucα1-3)GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAc and SAα2-6Galβ1-4GlcNAcβ1-3Galβ1-3(Fucα1-4)GlcNAc.

8) The construct of claim 7 where Glyc is a glycan selected from the group consisting of the group of mono-, di-, tri- and oligosaccharides: $(Neu5Ac\alpha6Gal\beta4GlcNAc\beta2Man\alpha)_2$3,6Manβ4GlcNAcβ4GlcNAcβ (YDS); Fucα2Galβ (H_{di}); Fucα2Galβ3(Fucα4)GlcNAcβ (Le^b); Fucα2Galβ3GlcNAcβ3Galβ4Glcβ (LNFP I); Fucα2Galβ4(Fucα3)GlcNAcβ (Le^y); Fucα2Galβ4GlcNAcβ (H2); Galα; Galα3(Fucα2)Galβ (B_{tri}); Galα3(Fucα2)Galβ3(Fucα4)GlcNAcβ (Ble^b); Galα3(Fucα2)Galβ3GalNAcα (B3); Galα3(Fucα2)Galβ3GalNAcβ (B4); Galα3(Fucα2)Galβ3GlcNAcβ (B1); Galα3(Fucα2)Galβ4(Fucα3)GlcNAcβ (Ble^y); Galα3(Fucα2)Galβ4GlcNAcβ (B2); Galα3Galβ4GlcNAcβ (Galili); Galα4Galβ4GlcNAcβ (P_1); Galα4Galβ4Glcβ (Gb3 (P^k)); Galα4GlcNAcβ (α-LN); GalNAcα3(Fucα2)Galβ (A_{tri}); GalNAcα3(Fucα2)Galβ3(Fucα4)GlcNAcβ (ALe^b); GalNAcα3(Fucα2)Galβ3GalNAcα (A3); GalNAcα3(Fucα2)Galβ3GalNAcβ (A4); GalNAcα3(Fucα2)Galβ3GlcNAcβ (A1); GalNAcα3(Fucα2)Galβ4(Fucα3)GlcNAcβ (ALe^y); GalNAcα3(Fucα2)Galβ4GlcNAcβ (A2); GalNAcα3GalNAcβ (Fs2); GalNAcα3GalNAcβ3Galα4Galβ4Glcβ (Fs5); GalNAcα3Galβ (A_{di}); GalNAcα3Galβ4GlcNAcβ; GalNAcβ; GalNAcβ3Galα4Galβ4Glcβ (P); $GalNH_2$α3(Fucα2)Galβ (AcqB); Galβ; Galβ3(Fucα4)GlcNAcβ (Le^a); Galβ3GalNAcα (TF); Galβ3GalNAcβ4Galβ4Glcβ (GA1); Galβ4(Fucα3)GlcNAcβ (Le^x); Galβ4GlcNAcβ3Galβ4GlcNAcβ (i(LN_2)); Galβ4GlcNAcβ3Galβ4Glcβ (LNnT); Galβ4Glcβ (Lac); GlcAβ3$[GlcNAc\beta4GlcA\beta3]_n$GlcNAc-aminoalditol (hyaluronate); Manα6(Manα3)Manβ (Man_3); Neu5Acα3Galβ4GlcNAcβ

(Neu5Ac3'LN); Neu5Acα3Galβ4Glcβ (Neu5Ac3'Lac); Neu5Acα6GalNAcαβ (SiaTn); Neu5Acα6Galβ4GlcNAcβ (Neu5Ac6'LN) and Neu5Gcα3Galβ4GlcNAcβ (Neu5Gc3'LN).

9) The construct of claim 8 where Glyc is a glycan selected from: Galα3Galβ4GlcNAcβ (Galili$_N$) and GalNAcα3Galβ4GlcNAcβ.

10) The construct of claim 3 where F is an oligopeptide comprising an N-maleoyl-β-alanine conjugated Cys residue and the multivalent ligand-lipid construct is of the structure:



where Xaa is an amino acid residue and i and j are independently either zero or integers the sum of which is in the range 5 to 30 inclusive.

11) The construct of claim 10 where i is an integer in the range 5 to 30 inclusive and j is zero.

12) The construct of claim 11 where i is the integer 13 and j is zero.

13) The construct of claim 12 where the oligopeptide is the peptide of SEQ ID NO: 01.