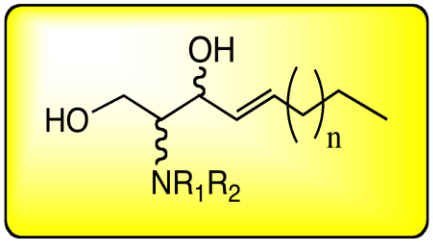
Chemical Structures of Selected LCL Compounds Targeting Metabolic and Signaling Pathways of SPLs

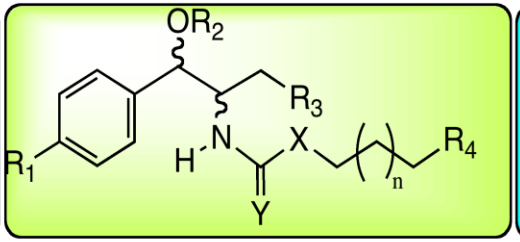


LCL- 57, D-e-18C-SPH, n = 11, R1,2 = H;
LCL-154, L-e-18C-SPH, n = 11, R1,2 = H;
LCL-155, L-t-18C-SPH, n = 11, R1,2 = H;
LCL-154, D-t-18C-SPH, n = 11, R1,2 = H;

LCL-368, D-e-17C-SPH, n = 10, R1,2 = H;
LCL-530, L-e-17C-SPH, n = 10, R1,2 = H;

LCL- 146, D-e-2-guanidino-SPH, n = 11, R1,2 = (C=NH)NH2. HCl

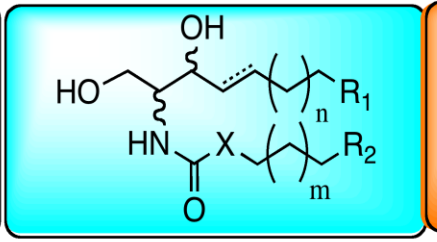
LCL- 351, L-e-2-guanidino-SPH, n = 11, R1,2 = (C=NH)NH2.HCl



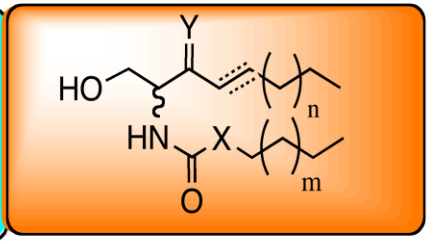
LCL- 1, D-e-MAPP, n = 9, X = CH2, Y= O, R1,3,4 = H; R2 = OH;
LCL- 4, D-t-B13, n=9, X=CH2,Y=O, R1= NO2, R2,3=OH, R4=H;

LCL-16, D-e-, n = 9, X = NH,Y = O, R1,2,3,4 = H;
LCL-85, D-t-, n = 9, X = CH2,Y = O, R1 = NO2, R2, 3= OH, R4 = pyridinium bromide;
LCL-120, D-e-, n = 12, X = CH2,Y =O, R1,3= H; R2 = OH, R4 = pyridinium bromide;
LCL- 204, D-t-, n = 9, X, Y = CH2, R1= NO2, R2,3 = OH, R4 = H;
LCL- 284, D-e-, n = 9, X, Y = CH2, R1,3,4 = H; R2 = OH

LCL- 521, D-t-DMG-B13 . 2HCl, n = 9, X= CH2,Y= O, R1 = NO2, R2,3 = ODMG, R4 = H, DMG = Dimethylglycine moiety.



LCL-29, D-e-, n = 12, m= 2, X = CH2, R1 = H, R2 = pyridinium bromide;
LCL-30, D-e-, n =12, m= 12, X = CH2, R1 = H, R2 = pyridinium bromide;
LCL-124, L-t-, n = 12, m= 2, X = CH2, R1 = H, R2 = pyridinium bromide;
LCL-461, D-e-, n = 8, m= 14, X = CH2, R2= H, R1 = pyridinium bromide;
LCL-366, (2S,3R,2'R), n =12, m = 3, X =CHOH, R1,2 = H;
LCL-367, (2S,3R,2'S), n =12, m = 3, X =CHOH, R1,2 = H;



LCL- 47, 2S, 4,5-dh, n = 11, m= 4, X = CH2, Y = O ;
LCL- 54, D-e-, 4,5-deh, n =11, m= 4, X = CH2, Y = OH;
LCL- 235, 2S, 4,5-deh, n = 11, m= 4, X = CH2, Y = O ;
LCL- 665, 2S, 3-Cl, 4,5-deh, n = 11, m= 4, X = CH2, Y = O ;
LCL- 447, (2S,3R,2'S), 4,5-dh, n =11, m = 2, X = CHOH,

Sph Kinases (SK1 and SK2)

ACDase

Enzymes controling cell death signaling pathways

Cer Desaturase DES

Established or Putative Protein Targets