

Supplemental Table 1 Levels of individual ceramides and dihydroceramides

		Control shRNA		FA2H shRNA	
		No db-cAMP	1 mM db-cAMP	No db-cAMP	1 mM db-cAMP
Cer	14:0	0.64 ± 0.23	1.20 ± 0.19	0.38 ± 0.02	2.91 ± 2.68
	16:0	4.05 ± 0.77	7.09 ± 0.91	3.68 ± 1.47	4.76 ± 1.01
	18:0	0.44 ± 0.40	0.66 ± 0.14	0.32 ± 0.11	0.65 ± 0.41
	18:1	1.74 ± 0.95	2.26 ± 0.06	0.89 ± 0.10	2.36 ± 1.51
	20:0	2.11 ± 1.38	2.21 ± 0.28	1.29 ± 0.28	2.40 ± 1.59
	20:1	0.24 ± 0.04	0.52 ± 0.01	0.20 ± 0.10	0.28 ± 0.07
	20:4	0.02 ± 0.01	0.02 ± 0.01	0.02 ± 0.01	0.02 ± 0.01
	22:0	5.09 ± 0.21	5.17 ± 0.89	3.85 ± 0.89	5.51 ± 0.27
	22:1	2.24 ± 0.31	2.26 ± 0.51	2.23 ± 0.74	2.06 ± 0.32
	24:0	64.27 ± 9.76	48.62 ± 4.84	46.28 ± 3.25	56.33 ± 10.50
	24:1	39.53 ± 3.95	40.86 ± 9.23	43.01 ± 8.84	46.69 ± 4.72
	26:0	5.66 ± 1.34	1.15 ± 0.30	2.14 ± 0.20	1.62 ± 0.73
	26:1	6.90 ± 0.30	2.39 ± 0.60	6.73 ± 0.55	3.32 ± 0.73
hFA-Cer	h12:0	bdl	bdl	bdl	bdl
	h14:0	(7.68 ± 3.69)x10 <sup>-1</sup>	(7.61 ± 1.71)x10 <sup>-1</sup>	(6.18 ± 0.54)x10 <sup>-1</sup>	(5.76 ± 0.98)x10 <sup>-1</sup>
	h16:0	(9.15 ± 0.10)x10 <sup>-1</sup>	(4.10 ± 0.27)x10 <sup>-1</sup>	(2.03 ± 0.42)x10 <sup>-1</sup>	(3.50 ± 0.83)x10 <sup>-1</sup>
	h18:0	(2.98 ± 2.29)x10 <sup>-1</sup>	(4.45 ± 1.37)x10 <sup>-1</sup>	(7.43 ± 1.49)x10 <sup>-2</sup>	(2.48 ± 0.43)x10 <sup>-1</sup>
	h18:1	(1.83 ± 1.28)x10 <sup>-1</sup>	(2.60 ± 1.04)x10 <sup>-1</sup>	(2.45 ± 0.39)x10 <sup>-2</sup>	(9.61 ± 4.12)x10 <sup>-2</sup>
	h20:0	(1.80 ± 0.75)x10 <sup>-1</sup>	(4.52 ± 0.46)x10 <sup>-1</sup>	(6.39 ± 0.42)x10 <sup>-2</sup>	(17.1 ± 0.99)x10 <sup>-2</sup>
	h22:0	(0.96 ± 0.71)x10 <sup>-2</sup>	(1.70 ± 0.54)x10 <sup>-2</sup>	(0.30 ± 0.13)x10 <sup>-2</sup>	(0.72 ± 0.19)x10 <sup>-2</sup>
	h24:0	(2.77 ± 0.73)x10 <sup>-2</sup>	(1.36 ± 0.40)x10 <sup>-2</sup>	(1.18 ± 0.38)x10 <sup>-2</sup>	(1.14 ± 0.57)x10 <sup>-2</sup>
	h24:1	(7.17 ± 3.15)x10 <sup>-2</sup>	(1.47 ± 0.92)x10 <sup>-2</sup>	(4.93 ± 1.07)x10 <sup>-2</sup>	(2.63 ± 1.58)x10 <sup>-2</sup>
	h26:0	bdl	bdl	bdl	bdl
	h26:1	bdl	bdl	bdl	bdl
h28:0	bdl	bdl	bdl	bdl	
DHC	12:0	bdl	bdl	bdl	bdl
	14:0	1.43 ± 0.42	1.63 ± 0.76	1.48 ± 0.21	1.06 ± 0.07
	16:0	6.34 ± 1.96	6.66 ± 1.55	7.04 ± 1.80	3.45 ± 0.70
	18:0	0.24 ± 0.15	0.24 ± 0.06	0.14 ± 0.04	0.12 ± 0.07
	18:1	0.11 ± 0.09	0.09 ± 0.03	0.04 ± 0.00	0.10 ± 0.06
	20:0	0.18 ± 0.03	0.11 ± 0.03	0.12 ± 0.05	0.09 ± 0.03
	20:1	0.07 ± 0.03	0.06 ± 0.01	0.04 ± 0.02	0.07 ± 0.02
	22:0	0.61 ± 0.16	0.24 ± 0.05	0.54 ± 0.12	0.25 ± 0.01
	22:1	0.24 ± 0.09	0.18 ± 0.05	0.21 ± 0.04	0.19 ± 0.05
	24:0	1.91 ± 0.64	0.21 ± 0.05	1.46 ± 0.44	0.38 ± 0.11
	24:1	2.45 ± 0.15	1.24 ± 0.45	3.40 ± 1.20	1.10 ± 0.18
	26:0	0.20 ± 0.16	0.03 ± 0.01	0.05 ± 0.01	0.10 ± 0.05
26:1	0.80 ± 0.71	0.13 ± 0.02	0.40 ± 0.05	0.24 ± 0.12	
hFA-DHC	h14:0	(2.61 ± 1.91)x10 <sup>-2</sup>	bdl	(3.55 ± 2.35)x10 <sup>-2</sup>	bdl
	h16:0	(1.01 ± 0.73)x10 <sup>-1</sup>	(2.95 ± 0.70)x10 <sup>-1</sup>	(2.68 ± 1.58)x10 <sup>-2</sup>	(1.50 ± 0.79)x10 <sup>-1</sup>
	h18:0	bdl	bdl	bdl	bdl
	h18:1	(1.38 ± 1.18)x10 <sup>-1</sup>	(1.16 ± 0.27)x10 <sup>-1</sup>	(2.19 ± 1.3)x10 <sup>-2</sup>	(8.29 ± 4.70)x10 <sup>-2</sup>
	h20:0	bdl	bdl	bdl	bdl
	h22:0	bdl	bdl	bdl	bdl
	h24:0	(2.59 ± 0.80)x10 <sup>-3</sup>	(1.36 ± 1.46)x10 <sup>-3</sup>	(5.75 ± 2.45)x10 <sup>-4</sup>	(1.09 ± 0.24)x10 <sup>-3</sup>
	h24:1	(3.21 ± 1.18)x10 <sup>-3</sup>	(2.57 ± 0.97)x10 <sup>-3</sup>	(4.58 ± 0.24)x10 <sup>-4</sup>	(1.09 ± 0.60)x10 <sup>-3</sup>
	h26:0	bdl	bdl	bdl	bdl
	h26:1	bdl	bdl	bdl	bdl

The mean ± S.D. (pmole/mg protein) of triplicate measurements are shown. bdl, below detectable level.