

Supplement- Table

Table 1. **Comparison of SPHK1 and SPHK2 activities in various human colon cancer cell lines.** SPHK1 and SPHK2 enzyme activities were measured as described in the Experimental Procedures, and are shown as pmol/min/mg protein. Data are expressed as mean +/- SD of 3 different experiments.

Figure legends for supplementary figures

Supplement- Fig. 1. **Analysis of ceramide molecular species and changes in ceramide levels upon L-OHP treatment in HCT116, LeVo and RKO cells.** (A) Cellular ceramide levels in HCT116, LeVo and RKO cells were analyzed using LC-MS/MS as described in the Experimental Procedures. The values are expressed as means +/- SD of 3 different experiments. (B) Three cells were treated with or without 5 µg/ml of L-OHP for 12 h, and cell lipids were extracted. Ceramide levels were analyzed and the results are expressed as percentages of cells without L-OHP, and are shown as means +/- SD of 3 different experiments.

Supplement- Fig. 2. **Effect of fumonisin B1 or transfection of nSMase2 siRNA on ceramide accumulation induced by L-OHP and SPHK inhibitor in RKO cells.** (A) RKO cells were transfected with siRNA of *nSNase2* (100 nM) and scramble siRNA as described in the Experimental Procedures. After 48 h, cells were subjected to Western blot analysis using antibody against nSMase2. (B) Cells transfected with or without *nSNase2* siRNA were pretreated with or without SPHK inhibitor (SKI; 3 µM) or fumonisin B1 (50 µM) for 2 h, and then treated with or without L-OHP (5 µg/ml) for 24 h. Cellular ceramide levels were analyzed using LC-MS/MS as described in the Experimental Procedures. The results are expressed as percentages of cells without L-OHP and inhibitors, and are shown as means +/- SD of 3 different experiments. *, P<0.01

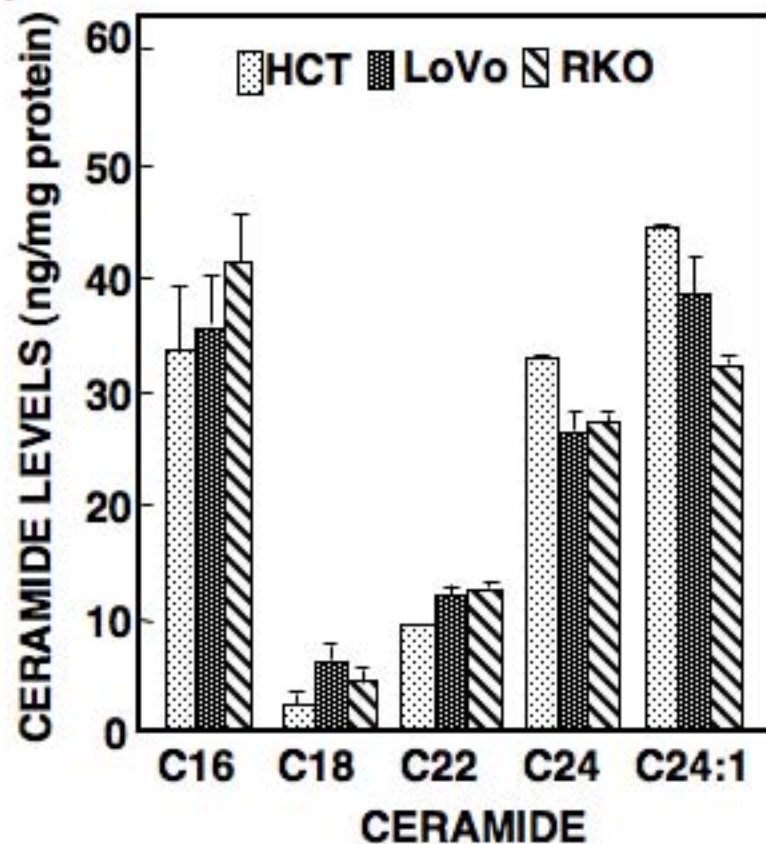
Supplement- Fig. 3. **Expression of proapoptotic proteins in HCT116 and RKO cells after treatment with L-OHP.** HCT116 and RKO cells were treated with 5 µg/ml of L-OHP, and after the indicated times, the cells were collected. The cell lysates were subjected to Western blot analysis using the antibodies against p53, p21, and Bax. β-Actin was used as the loading control.

Supplementary Table 1.

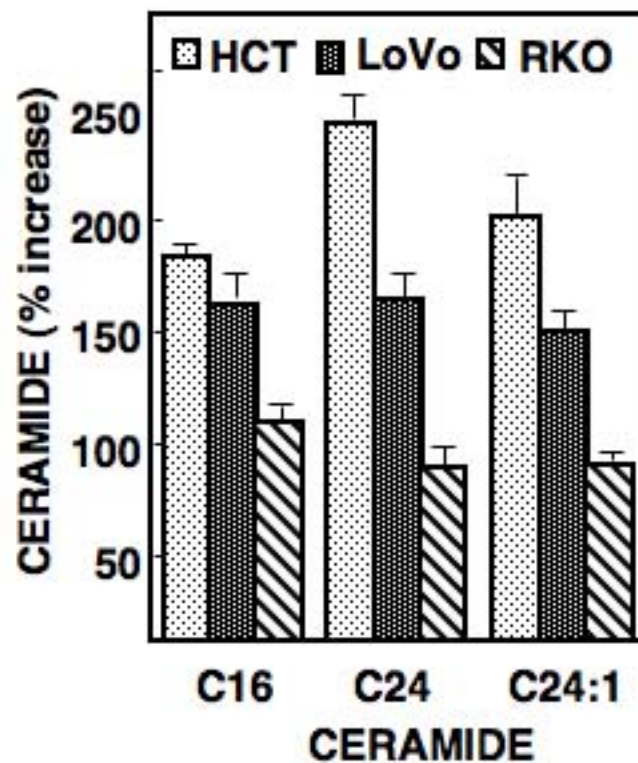
Colon cancer cells	SPHK1 (pmol/min/mg protein)	SPHK2
CoLo320DM	1.63±0.71	11.82±0.81
DLD-1	6.58±0.95	10.51±1.82
HCT-15	8.38±1.05	4.82±1.34
SW480	16.47±1.26	4.02±1.56
LoVo	20.84±5.19	25.82±1.51
HCT116	2.43±0.26	3.48±1.02
LS174T	10.27±0.78	15.23±7.81
RKO	57.90±11.5	68.81±11.5
Caco-2	4.96±1.09	14.53±9.81

Supplementary Fig. 1

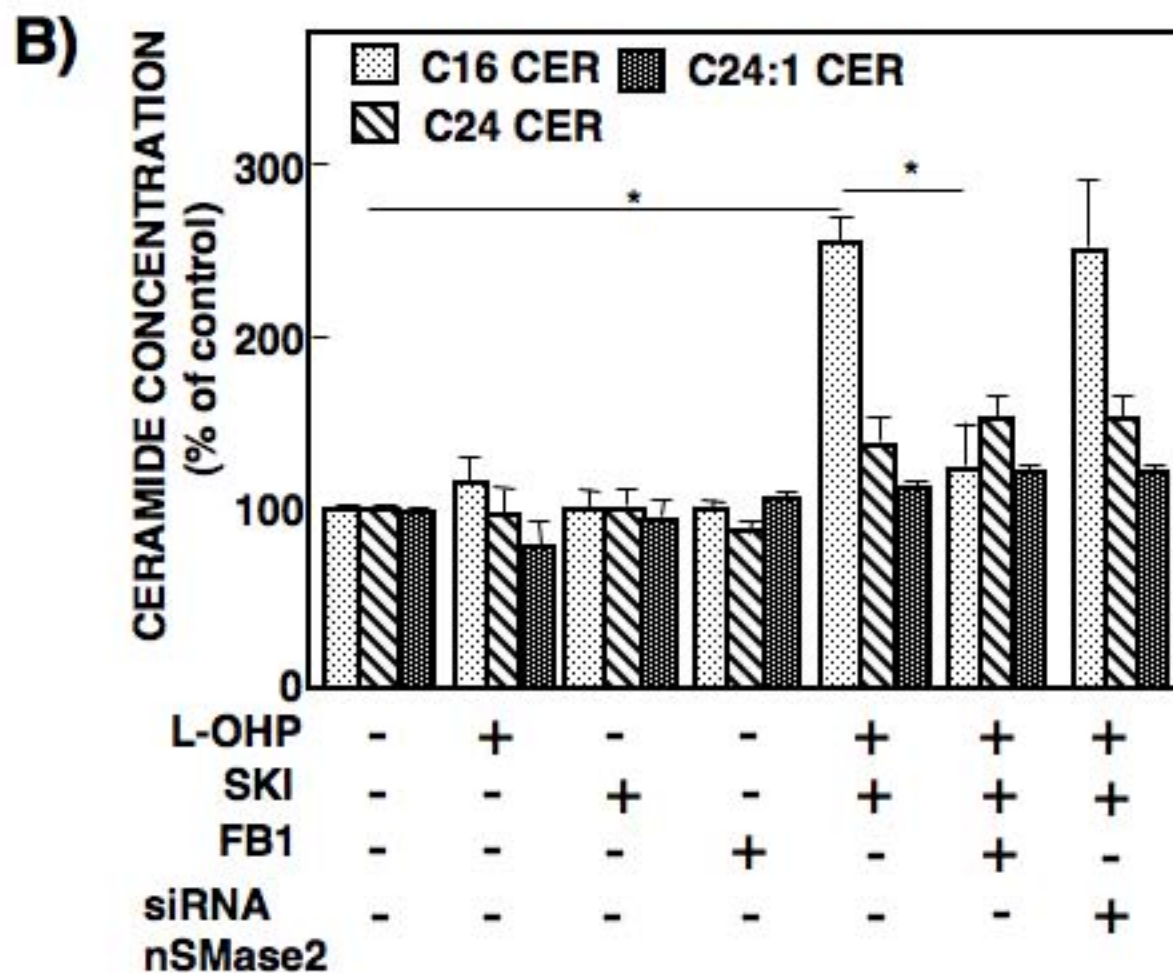
A)



B)



Supplementary Fig. 2



Supplementary Fig. 3

