## Supplemental data

## Table 1.

Step	Volume of fraction (ml)	Concentration (mg/ml)	Total amount (mg)	Activity (units)	Specific activity (units/mg protein)	Yield (%)	Purification factor fold
Cell lysate	100	13.5	1350	22.3	0.0165	100	1.0
Protamine sulfate	100	5.63	563	11.3	0.020	50.6	1.21
Ni-column	17.43	0.15	2.7	7.2	2.66	32.28	161.21
Phenyl sepharose	8.5	0.21	1.8	6.1	3.38	27.35	204.84
<b>Q-Sepharose</b>	2.3	0.69	1.6	5.8	3.625	26.00	219.69

Table 1. Bacterial ceramidase was purified from two liters of culture as described in experimental procedures. One enzyme unit was defined as the amount capable of hydrolyzing 1  $\mu$ mol ceramide/ min at 37°C using D-erythro-C16 ceramide as a substrate at a concentration of 50  $\mu$ M in a 50 mM (pH 7.1) Tris- HCl buffer containing 1 mM CaCl<sub>2</sub>, 0.1% (w/v) Triton X-100 final concentration, with a total volume of 100  $\mu$ l.

Step	Volume of fraction (ml)	Concentration (mg/ml)	Total amount (mg)	Activity (units)	Specific activity (units/mg protein)	Yield (%)	Purification factor fold
Cell lysate	100	7.56	756	17.32	0.0229	100	1.0
Protamine sulfate	95	3.7	352	9.43	0.026	54.44	1.135
Ni-column	25	0.048	1.2	6.23	5.19	35.96	226.6
Phenyl sepharose	2	0.35	0.7	2.4	3.42	13.8	149.34

Table 2. Sphingomyelinase D was purified from four liters of culture as described in experimental procedures. One enzyme unit was defined as the amount capable of hydrolyzing 1  $\mu$ mol sphingomyelin/ min at 37°C using D-erythro-C16-sphingomyelin as a substrate at a concentration of 50  $\mu$ M in a 10 mM (pH 7.4) HEPES buffer containing 1 mM CaCl<sub>2</sub>, 5 mM KCl, 1 mM MgCl<sub>2</sub>, with a total volume of 100  $\mu$ l.