

Table S1. The effect of γ TE on sphingolipids in RAW264.7 cells

RAW cells were treated with γ TE at 20 μ M or vehicle (Ctrl) for 8 or 16 h. Lipids were extracted and sphingolipids were measured by LC-MS/MS (Materials and Methods). All data are mean \pm SEM. The Student's t test was used to analyze results. *P < 0.05 and **P < 0.01 indicate significant differences between control and γ TE-treated cells. Cer: Ceramide; dhCer: dihydroceramide; Sph: sphingosine; dhSph: dihydrosphingosine; Sph-P: sphingosine 1 phosphate; dhSph-P: dihydrosphingosine phosphate; PC: Total phospholipids

| Ceramides (pmol/ μ g PC) | Ctrl 8 h | γ TE 20 μ M 8 h | Ctrl 16 h | γ TE 20 μ M 16 h |
|------------------------------|-------------------|----------------------------|-------------------|-----------------------------|
| C16:0-Cer | 1.85 \pm 0.15 | 2.02 \pm 0.26 | 1.64 \pm 0.12 | 2.03 \pm 0.20 |
| C18:0-Cer | 0.14 \pm 0.016 | 0.13 \pm 0.014 | 0.11 \pm 0.01 | 0.12 \pm 0.01 |
| C20:0-Cer | 0.087 \pm 0.01 | 0.069 \pm 0.01* | 0.062 \pm 0.01 | 0.066 \pm 0.005 |
| C22:0-Cer | 0.70 \pm 0.061 | 0.56 \pm 0.059 | 0.40 \pm 0.032 | 0.44 \pm 0.038 |
| C24:1-Cer | 3.33 \pm 0.57 | 2.07 \pm 0.30** | 2.75 \pm 0.47 | 1.84 \pm 0.31* |
| C24:0-Cer | 4.86 \pm 0.56 | 3.31 \pm 0.44* | 2.69 \pm 0.43 | 3.98 \pm 0.69* |
| C26:1-Cer | 0.072 \pm 0.011 | 0.054 \pm 0.01* | 0.033 \pm 0.006 | 0.030 \pm 0.005 |
| C26:0-Cer | 0.048 \pm 0.014 | 0.037 \pm 0.013 | 0.024 \pm 0.006 | 0.040 \pm 0.009 |
| Total Cer | 11.09 \pm 1.17 | 8.25 \pm 0.87* | 7.71 \pm 0.85 | 8.55 \pm 1.11 |

| Dihydroceramides (pmol/ μ g PC) | Ctrl 8 h | γ TE 20 μ M 8 h | Ctrl 16 h | γ TE 20 μ M 16 h |
|-------------------------------------|---------------------|----------------------------|----------------------|-----------------------------|
| C16:0-dhCer | 0.20 \pm 0.023 | 0.43 \pm 0.031** | 0.10 \pm 0.0009 | 0.32 \pm 0.038** |
| C18:0-dhCer | 0.0060 \pm 0.001 | 0.011 \pm 0.001** | 0.0022 \pm 0.0002 | 0.0079 \pm 0.001** |
| C20:0-dhCer | 0.0024 \pm 0.0005 | 0.0047 \pm 0.001** | 0.00074 \pm 0.0001 | 0.0029 \pm 0.0004** |
| C22:0-dhCer | 0.016 \pm 0.005 | 0.028 \pm 0.007** | 0.0034 \pm 0.0003 | 0.015 \pm 0.002** |
| C24:1-dhCer | 0.034 \pm 0.01 | 0.053 \pm 0.01* | 0.014 \pm 0.002 | 0.038 \pm 0.01** |
| C24:0-dhCer | 0.053 \pm 0.02 | 0.086 \pm 0.02** | 0.012 \pm 0.002 | 0.072 \pm 0.01** |
| Total dhCer | 0.31 \pm 0.05 | 0.61 \pm 0.05** | 0.13 \pm 0.01 | 0.46 \pm 0.05** |

| Sphingoid bases (pmol/ μ g PC) | Ctrl 8 h | γ TE 20 μ M 8 h | Ctrl 16 h | γ TE 20 μ M 16 h |
|------------------------------------|--------------------|----------------------------|--------------------|-----------------------------|
| Sph | 0.93 \pm 0.088 | 0.73 \pm 0.088* | 0.77 \pm 0.088 | 0.54 \pm 0.069* |
| dhSph | 0.25 \pm 0.027 | 0.30 \pm 0.043 | 0.18 \pm 0.013 | 0.18 \pm 0.041 |
| Sph-P | 0.032 \pm 0.005 | 0.032 \pm 0.007 | 0.035 \pm 0.003 | 0.017 \pm 0.001 |
| dhSph-P | 0.0076 \pm 0.004 | 0.013 \pm 0.007 | 0.0084 \pm 0.005 | 0.0047 \pm 0.002 |

| Sphingomyelins (pmol/ μ g PC) | Ctrl 8 h | γ TE 20 μ M 8 h | Ctrl 16 h | γ TE 20 μ M 16 h |
|-----------------------------------|------------------|----------------------------|------------------|-----------------------------|
| C16:0-SM | 82.05 \pm 6.01 | 78.63 \pm 6.86 | 71.95 \pm 7.62 | 55.72 \pm 2.22* |
| C18:0-SM | 7.64 \pm 0.79 | 6.21 \pm 1.04 | 6.37 \pm 1.06 | 4.45 \pm 0.58* |

| | | | | |
|----------|--------------|--------------|--------------|--------------|
| C20:0-SM | 3.59±0.35 | 2.95±0.43 | 3.12±0.52 | 2.26±0.25 |
| C22:0-SM | 18.53±2.23 | 14.10±1.94 | 15.52±2.61 | 11.06±0.83 |
| C24:1-SM | 52.17±6.02 | 38.91±4.94 | 45.01±6.51 | 25.88±1.81** |
| C24:0-SM | 23.25±4.98 | 17.86±3.37 | 24.71±5.95 | 17.99±1.96 |
| C26:1-SM | 0.44±0.099 | 0.36±0.057 | 0.35±0.082 | 0.28±0.031 |
| C26:0-SM | 0.092±0.018 | 0.078±0.014 | 0.100±0.018 | 0.091±0.011 |
| Total SM | 187.75±16.77 | 151.65±17.16 | 167.13±21.94 | 117.74±6.18* |

| Dihydro-sphingomyelins (pmol/μg PC) | Ctrl 8 h | γTE 20 μM 8 h | Ctrl 16 h | γTE 20 μM 16 h |
|-------------------------------------|------------|---------------|------------|----------------|
| C16:0-dhSM | 25.75±3.15 | 25.46±3.30 | 17.82±2.68 | 20.39±0.79 |
| C18:0-dhSM | 3.32±0.58 | 2.74±0.40 | 2.25±0.47 | 1.89±0.14 |
| C20:0-dhSM | 1.00±0.19 | 0.88±0.14 | 0.71±0.15 | 0.68±0.036 |
| C22:0-dhSM | 3.79±0.81 | 3.57±0.60 | 3.27±0.77 | 3.40±0.29 |
| C24:1-dhSM | 7.87±2.62 | 6.48±1.20 | 6.27±1.75 | 5.30±0.95 |
| C24:0-dhSM | 2.30±0.77 | 2.00±0.42 | 2.37±0.73 | 3.04±0.43 |
| Total dhSM | 44.09±7.11 | 41.16±5.39 | 32.74±5.67 | 34.74±1.70 |