**C20 Ceramide (d18:1/20:0)**

**Item No. 10724**

**CAS Registry No.:** 7344-02-7

**Formal Name:** N-[2R-hydroxy-1S-(hydroxymethyl)-3E-heptadecen-1-yl]-eicosanamide

**Synonyms:** Cer(d18:1/20:0), Ceramide (d18:1/20:0), N-arachidoyl-D-erythro-Sphingosine

**MF:** C_{38}H_{75}NO_{3}

**FW:** 594.0

**Purity:** ≥98%

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

**Laboratory Procedures**

C20 Ceramide (d18:1/20:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the C20 ceramide (d18:1/20:0) in the solvent of choice. C20 Ceramide (d18:1/20:0) is soluble in dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of C20 ceramide (d18:1/20:0) in DMF is approximately 0.15 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

**Description**

Ceramides are generated from sphingomyelin through activation of sphingomyelinases or through the de novo synthesis pathway. Certain forms of ceramide have been shown to mediate cellular responses such as apoptosis, growth arrest, and differentiation in certain cell types.\(^1,2\) C20 Ceramide is a natural 20:0 ceramide that is abundant in the brain. It is synthesized de novo by ceramide synthases 1 and 2.\(^3,4\)

**References**


