

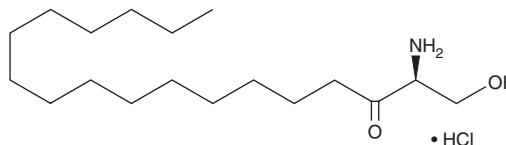
# PRODUCT INFORMATION



## 3-keto Sphinganine (d18:0) (hydrochloride)

Item No. 24380

**CAS Registry No.:** 25515-53-1  
**Formal Name:** 2S-amino-1-hydroxy-3-octadecanone, monohydrochloride  
**Synonyms:** 3-dehydro Sphinganine, 3-keto Dihydrosphingosine, 3-keto Sphinganine  
**MF:** C<sub>18</sub>H<sub>37</sub>NO<sub>2</sub> • HCl  
**FW:** 336.0  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

3-keto Sphinganine (d18:0) (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the 3-keto sphinganine (d18:0) (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 3-keto Sphinganine (d18:0) (hydrochloride) is soluble in organic solvents such as ethanol, methanol, and chloroform.

### Description

3-keto Sphinganine (d18:0) is an intermediate in the biosynthesis of C18 ceramide (d18:1/18:0) (Item No. 19556).<sup>1</sup> It is a lyso-sphingolipid formed by the condensation of L-serine and palmitoyl-CoA by serine palmitoyl transferase (SPT). Vitamin K deficiency inactivates SPT resulting in a decrease in the production of 3-keto sphinganine (d18:0) and other sphingolipids.<sup>2</sup>

### References

1. Bartke, N. and Hannun, Y.A. Bioactive sphingolipids: Metabolism and function. *J. Lipid Res.* **50(Suppl)**, S91-S96 (2009).
2. Batheja, A.D., Uhlinger, D.J., Carton, J.M., *et al.* Characterization of serine palmitoyltransferase in normal human tissues. *J. Histochem. Cytochem.* **51(5)**, 687-696 (2003).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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