# PRODUCT INFORMATION

## Simvastatin Hydroxy Acid (ammonium salt)

*Item No. 34883*

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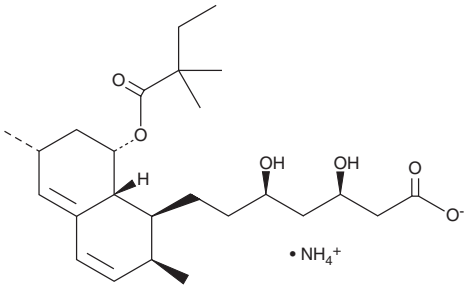
| **CAS Registry No.:** | 139893-43-9 |
| **Formal Name:** | (βR,δR,1S,2S,6R,8S,8aR)-8-(2,2-dimethyl-1-oxobutoxy)-1,2,6,7,8,8a-hexahydro-β,δ-dihydroxy-2,6-dimethyl-1-naphthaleneheptanoic acid, monoammonium salt |
| **Synonym:** | SVA Hydroxy Acid |
| **MF:** | $C_{25}H_{39}O_6 \bullet NH_4$ |
| **FW:** | 453.6 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 231, 238, 247 nm |
| **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

Simvastatin hydroxy acid (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the simvastatin hydroxy acid (ammonium salt) in the solvent of choice, which should be purged with an inert gas. Simvastatin hydroxy acid (ammonium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of simvastatin hydroxy acid (ammonium salt) in these solvents is approximately 1 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of simvastatin hydroxy acid (ammonium salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of simvastatin hydroxy acid (ammonium salt) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Simvastatin hydroxy acid is an inhibitor of HMG-CoA reductase ($K_i$ = 0.12 nM) and an active metabolite of simvastatin (Item Nos. 10010344 | 10010345).[1] It is formed from simvastatin *via* hydrolysis and nonspecific esterases.[2]

### References


1. Corsini, A., Maggi, F.M., and Catapano, A.L. Pharmacology of competitive inhibitors of HMG-CoA reductase. *Pharmacol. Res.* **31(1)**, 9-27 (1995).
2. Vickers, S., Duncan, C.A., Vyas, K.P., *et al*. *In vitro* and *in vivo* biotransformation of simvastatin, an inhibitor of HMG CoA reductase. *Drug Metab. Dispos.* **18(4)**, 476-483 (1990).





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