

PRODUCT INFORMATION

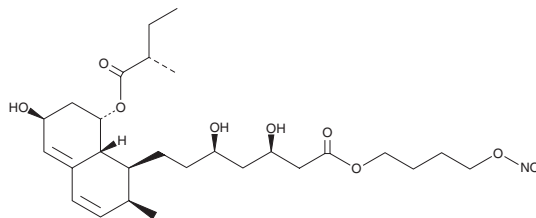


NO-Pravastatin

Item No. 10006044

CAS Registry No.: 733034-46-3
Formal Name: (β R, δ R,1S,2S,6S,8S,8aR)-1,2,6,7,8,8a-hexahydro- β , δ ,6-trihydroxy-2-methyl-8-[(2S)-2-methyl-1-oxobutoxy]-1-naphthaleneheptanoic acid, 4-(nitrooxy)butyl ester

Synonym: NCX 6550
MF: C₂₇H₄₃NO₁₀
FW: 541.6
Purity: \geq 95%
UV/Vis.: λ_{max} : 237 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

NO-pravastatin is supplied as a crystalline solid. A stock solution may be made by dissolving the NO-pravastatin in an organic solvent purged with an inert gas. NO-pravastatin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of NO-pravastatin in these solvents is approximately 30 mg/ml.

NO-pravastatin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NO-pravastatin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. NO-pravastatin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

NO-pravastatin is a derivative of pravastatin (Item No. 10010343) that contains a nitric oxide-releasing moiety.^{1,2} It induces cGMP formation in PC12 cells (EC_{50} = 2.3 μ M) and inhibits the proliferation of isolated rat aortic smooth muscle cells (IC_{50} = 2.2 μ M).¹ NO-pravastatin reduces inducible nitric oxide synthase (iNOS) and COX-2 levels in LPS-stimulated RAW 264.7 cells. NO-pravastatin (48.5 mg/kg) reduces splenocyte adhesion to artery segments isolated from wild-type and ApoE^{-/-} mice.² It reduces infarct size in a mouse model of myocardial infarction when administered at a dose of 22.4 μ mol/kg.³ NO-pravastatin (24-48 mg/kg) reduces platelet consumption, lung vessel occlusion, and mortality in mouse models of platelet pulmonary thromboembolism induced by collagen and epinephrine or U-46619 (Item No. 16450).⁴

References

1. Ongini, E., Impagnatiello, F., Bonazzi, A., *et al.* *Proc. Natl. Acad. Sci. USA* **101**(22), 8497-8502 (2004).
2. Dever, G., Spickett, C.M., Kennedy, S., *et al.* *J. Pharmacol. Exp. Ther.* **320**(1), 419-426 (2006).
3. Di Filippo, C., Monopoli, A., Ongini, E., *et al.* *Microcirculation* **17**(6), 417-426 (2010).
4. Rossiello, M.R., Momi, S., Caracchini, R., *et al.* *J. Thromb. Haemost.* **3**(11), 2554-2562 (2005).

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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