Lovastatin (Mevinolin), HMG-CoA reductase inhibitor

Overview

Product name | Lovastatin (Mevinolin), HMG-CoA reductase inhibitor
Description | Potent HMG-CoA reductase inhibitor
Biological description | Potent, competitive HMG-CoA reductase inhibitor ($K_i = 0.6 \text{ nM}$). Blood-brain barrier permeable. Inhibits in vivo and in vitro cholesterol biosynthesis. Also reduces α-synuclein levels in vitro and in vivo.
Purity | > 98%

Properties

Chemical name | (2S)-(1S,3R,7S,8S,8aR)-1,2,3,7,8,8a-Hexahydro-3,7-dimethyl-8-[(2R,4R)-tetrahydro-4-hydroxy-6-oxo-2H-pyran-2-yl]ethyl]-1-naphthalenyl-2-methyl butanoate
Molecular weight | 404.54
Chemical structure | ![Chemical structure](image)
Molecular formula | C$_{24}$H$_{36}$O$_5$
CAS Number | 75330-75-5
Storage instructions | Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview | Soluble in DMSO to 100 mM and in ethanol to 50 mM
Handling | Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
ab120614 staining cyclin A in DU145 cells treated with lovastatin (ab120614), by ICC/IF. Decrease in cyclin A expression correlates with increased concentration of lovastatin, as described in literature. The cells were incubated at 37°C for 24h in media containing different concentrations of ab120614 (lovastatin) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab87359 (5 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (ab96899) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"

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