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Activation of Simvastatin

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Dennis Juarez¹, David Fruman¹

¹University of California, Irvine



Dennis Juarez

University of California Irvine

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We use this protocol and it's working

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Abstract

Activation of simvastatin lactone to active simvastatin acid by hydrolysis of lactone ring with NaOH.



Materials

Simvastatin was obtained from Cayman Chemical Company

Troubleshooting



Preparation

- 1 For every 8.4 mg of simvastatin sodium salt, dissolve in 0.2 mL of 100% ethanol.
- 2 Add 30 uL of 1N NaOH for every 8.4 mg of simvastatin sodium salt.
- 3 Heat the solution for at  50 °C for 2 hours.
- 4 Neutralize the solution to pH 7.2 with 1N HCl.
- 5 Bring to a volume of 1 mL per 8.4 mg of simvastatin dissolved in Step 1 with distilled H₂O.
- 6 Dilute 1:1 with DMSO to yield a 10mM solution with 50% DMSO, and 10% EtOH in H₂O.
- 7 Store at  -80 °C