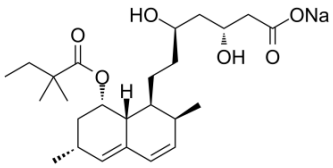
Simvastatin hydroxy acid sodium

Cat. No.:	HY-115292
CAS No.:	101314-97-0
Molecular Formula:	$C_{25}H_{39}NaO_6$
Molecular Weight:	458.56
Target:	HMG-CoA Reductase (HMGCR)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Simvastatin hydroxy acid sodium (Tenivastatin sodium; Simvastatin Impurity A sodium) is an active hydrolytic metabolite of Simvastatin (HY-17502)[1]. Simvastatin shows a inhibition of HMG-CoA reductase with a K_i value of 0.12 nM[2].
In Vitro	Simvastatin sodium shows a inhibition of HMG-CoA reductase in human lymphoblasts and SV40 transformed MRCS fibroblasts[1]. Simvastatin sodium (100 μM) inhibits the Na^+/H^+ antiport activity leading to a fall of intracellular pH and to a reduced cell proliferation.And the inhibitory effect is prevented by mevalonate but not dolichol or squalene[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Simvastatin sodium (oral administration; 8 mg/kg; 18 days) reduces plasma cholesterol levels 33%, simvastatin can be used in combination with ezetimibe to treat dyslipidemia[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Corsini A, et al. Pharmacology of competitive inhibitors of HMG-CoA reductase.Pharmacol Res. 1995 Jan;31(1):9-27.

[2]. Andrew Marsh, et al. Simvastatin Sodium Salt and Fluvastatin Interact with Human Gap Junction Gamma-3 Protein. PLoS One. 2016 Feb 10;11(2):e0148266.

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