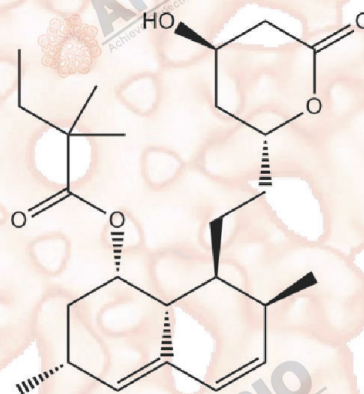


Product Data Sheet

Simvastatin (Zocor)

Cat. No.:	A8522
CAS No.:	79902-63-9
Formula:	C ₂₅ H ₃₈ O ₅
M.Wt:	418.6
Synonyms:	
Target:	Metabolism
Pathway:	HMG-CoA Reductase
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥102 mg/mL in EtOH with ultrasonic; ≥20.95 mg/mL in DMSO

In Vitro

	Solvent	Mass Concentration	1mg	5mg	10mg
Preparing Stock Solutions		1 mM	2.3889 mL	11.9446 mL	23.8892 mL
		5 mM	0.4778 mL	2.3889 mL	4.7778 mL
		10 mM	0.2389 mL	1.1945 mL	2.3889 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

HMGCR (HMG-CoA reductase) inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Mouse L-M cells (fibroblast), rat H4IIE cells (liver) and human Hep G2 cells (liver)
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

In Vivo	Reacting conditions:	13.3, 15.6 or 19.3 nM
	Applications:	In mouse L-M cells (fibroblast), rat H4IIE cells (liver) and human Hep G2 cells (liver), Simvastatin inhibited cholesterol synthesis with the IC50 values of 19.3 nM, 13.3 nM and 15.6 nM, respectively.
	Animal experiment	
	Animal models:	Dogs
	Dosage form:	50 mg/kg/d; p.o.; q.d., for 1 month
In Vivo	Applications:	Compared with L654,969 group, Simvastatin group showed a much lower serum cholesterol concentration. However, Simvastatin and Lovastatin showed equivalent cholesterol-lowering effects.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Slater EE, MacDonald JS. Mechanism of action and biological profile of HMG CoA reductase inhibitors. A new therapeutic alternative. Drugs. 1988;36 Suppl 3:72-82.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX-BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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