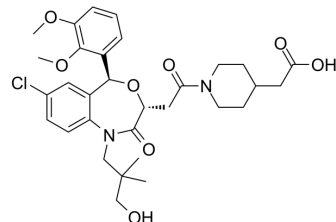


## Lapaquistat

<b>Cat. No.:</b>	HY-14925		
<b>CAS No.:</b>	189059-71-0		
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>39</sub> ClN <sub>2</sub> O <sub>8</sub>		
<b>Molecular Weight:</b>	603.1		
<b>Target:</b>	Endogenous Metabolite; Drug Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 25 mg/mL (41.45 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		1.6581 mL	8.2905 mL	16.5810 mL
		5 mM		0.3316 mL	1.6581 mL	3.3162 mL
10 mM			0.1658 mL	0.8290 mL	1.6581 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 0.83 mg/mL (1.38 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.83 mg/mL (1.38 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 0.83 mg/mL (1.38 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Lapaquistat (T-91485), a cholesterol biosynthesis inhibitor, is the active metabolite of <a href="#">Lapaquistat acetate</a> (HY-16274). Lapaquistat can decrease statin-induced myotoxicity in lipid-lowering therapy <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Cholesterol biosynthesis <sup>[1]</sup>
<b>In Vitro</b>	Lapaquistat inhibits cholesterol biosynthesis in differentiated RD (rhabdomyosarcoma) cells, with an IC <sub>50</sub> of 36 nM <sup>[1]</sup> . Lapaquistat potently inhibits cholesterol synthesis in RD cells, with an IC <sub>25</sub> exceeded 100 μM <sup>[1]</sup> .

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Lapaquistat concentration-dependently inhibits cholesterol biosynthesis in human skeletal myocytes, with an IC<sub>50</sub> of 45 nM [1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

After oral administration to rats, [Lapaquistat acetate](#) (HY-16274) is absorbed and rapidly hydrolyzed into a pharmacological active metabolite, Lapaquistat<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Mol Cell. 2023 Apr 14;S1097-2765(23)00243-5.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Nishimoto T, et al. Comparing myotoxic effects of squalene synthase inhibitor, T-91485, and 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase inhibitors in human myocytes. Biochem Pharmacol. 2003 Dec 1;66(11):2133-9.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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