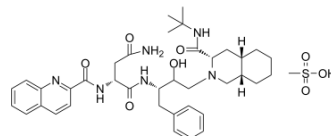


## Saquinavir Mesylate

<b>Cat. No.:</b>	HY-17003		
<b>CAS No.:</b>	149845-06-7		
<b>Molecular Formula:</b>	C <sub>39</sub> H <sub>54</sub> N <sub>6</sub> O <sub>8</sub> S		
<b>Molecular Weight:</b>	766.95		
<b>Target:</b>	HIV; HIV Protease; Autophagy		
<b>Pathway:</b>	Anti-infection; Metabolic Enzyme/Protease; Autophagy		
<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 : 20 mg/mL (26.08 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	<b>Preparing Stock Solutions</b>	<b>1 mM</b>	1.3039 mL	6.5193 mL
		<b>5 mM</b>	0.2608 mL	1.3039 mL
		<b>10 mM</b>	0.1304 mL	0.6519 mL
			<b>10 mg</b>	13.0387 mL
				2.6077 mL
				1.3039 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: ≥ 2 mg/mL (2.61 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2 mg/mL (2.61 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2 mg/mL (2.61 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	<p>Saquinavir mesylate is an HIV Protease Inhibitor used in antiretroviral therapy. IC50 Value:Target: HIV ProteaseSaquinavir is a protease inhibitor. Proteases are enzymes that cleave protein molecules into smaller fragments. HIV protease is vital for both viral replication within the cell and release of mature viral particles from an infected cell. Saquinavir binds to the active site of the viral protease and prevents cleavage of viral polyproteins, preventing maturation of the virus. Saquinavir inhibits both HIV-1 and HIV-2 proteases.Studies have also looked at Saquinavir as a possible anti-cancer agent.</p>
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- Int J Antimicrob Agents. 2019 Dec;54(6):814-819.
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- Exp Cell Res. 2019 Oct 1;383(1):111488.

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- [2]. Yerino GA, Halabe EK, Zini E, Feleder EC. Bioequivalence study of two oral tablet formulations containing saquinavir mesylate boosted with ritonavir in healthy male subjects. *Arzneimittelforschung.* 2011;61(8):481-7.
- [3]. Branham ML, Moyo T, Govender T. Preparation and solid-state characterization of ball milled saquinavir mesylate for solubility enhancement. *Eur J Pharm Biopharm.* 2012 Jan;80(1):194-202.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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