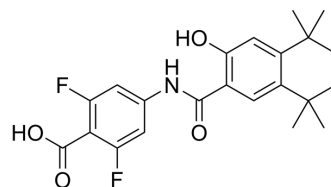


## AGN 194078

<b>Cat. No.:</b>	HY-100273		
<b>CAS No.:</b>	321995-62-4		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>23</sub> F <sub>2</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	403.42		
<b>Target:</b>	RAR/RXR; Autophagy		
<b>Pathway:</b>	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor; 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 : 100 mg/mL (247.88 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.4788 mL	12.3940 mL	24.7881 mL
		5 mM	0.4958 mL	2.4788 mL	4.9576 mL
10 mM		0.2479 mL	1.2394 mL	2.4788 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: ≥ 2.5 mg/mL (6.20 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.20 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.20 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	AGN 194078 is a selective RARα agonist with a K <sub>d</sub> and EC <sub>50</sub> of 3 and 112 nM, respectively.
<b>IC<sub>50</sub> &amp; Target</b>	K <sub>d</sub> : 4 nM (RARα) <sup>[1]</sup> EC <sub>50</sub> : 140 nM (RARα) <sup>[1]</sup>
<b>In Vitro</b>	AGN 194078 is a selective RARα agonist and binds to RARα with very high affinity, having a K <sub>d</sub> value of 3 nM, while being unable to bind to RARβ and binding only very weakly (K <sub>d</sub> =5600 nM) to RARγ. Furthermore, AGN 194078 maintains full

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transcriptional activity through RAR $\alpha$ , with an EC<sub>50</sub> value of 112 nM, but only activated RAR $\beta$  and RAR $\gamma$  with about 10% efficacy at the highest dose (1000 nM) tested<sup>[1]</sup>.

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

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## REFERENCES

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[1]. Beard RL, et al. Synthesis and biological activity of retinoic acid receptor-alpha specific amides. Bioorg Med Chem Lett. 2002 Nov 4;12(21):3145-8.

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

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