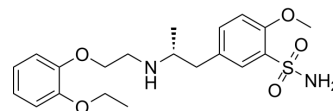


## Tamsulosin

<b>Cat. No.:</b>	HY-B0661		
<b>CAS No.:</b>	106133-20-4		
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub> S		
<b>Molecular Weight:</b>	408.51		
<b>Target:</b>	Adrenergic Receptor; Endogenous Metabolite		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (244.79 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
	<b>Preparing Stock Solutions</b>		10 mg	
	<b>1 mM</b>	2.4479 mL	12.2396 mL	24.4792 mL
	<b>5 mM</b>	0.4896 mL	2.4479 mL	4.8958 mL
	<b>10 mM</b>	0.2448 mL	1.2240 mL	2.4479 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 (6.12 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 (6.12 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Tamsulosin ((R)-(-)-YM12617 free base) is an inhibitor of α <sub>1</sub> -adrenergic receptor. Tamsulosin is used for the research of prostatic hyperplasia. Tamsulosin attenuates abdominal aortic aneurysm growth in animal models <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	α <sub>1</sub> -adrenergic receptor

### REFERENCES

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[1]. Christopher Chapple, et al. Tamsulosin: an overview. World J Urol. 2002 Apr;19(6):397-404.

[2]. William G. Montgomery, BA, et al. Tamsulosin Attenuates Abdominal Aortic Aneurysm Growth. Surgery. 2018 Nov; 164(5): 1087-1092.

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

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