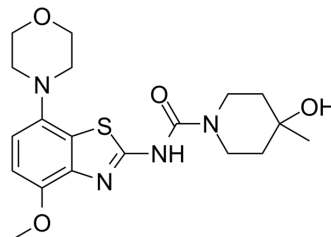


## Tozadenant

<b>Cat. No.:</b>	HY-10995		
<b>CAS No.:</b>	870070-55-6		
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>26</sub> N <sub>4</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	406.5		
<b>Target:</b>	Adenosine Receptor		
<b>Pathway:</b>	GPCR/G Protein		
<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 : 50 mg/mL (123.00 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.4600 mL	12.3001 mL	24.6002 mL
		5 mM	0.4920 mL	2.4600 mL	4.9200 mL
10 mM		0.2460 mL	1.2300 mL	2.4600 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 (6.15 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 (6.15 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.15 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Tozadenant is an adenosine A <sub>2A</sub> receptor antagonist, with K <sub>i</sub> of 11.5 nM on human A <sub>2A</sub> and 6 nM on rhesus A <sub>2A</sub> .
<b>IC<sub>50</sub> &amp; Target</b>	Ki: 6 nM (Rhesus A <sub>2A</sub> ), 11.5 nM (Human A <sub>2A</sub> )
<b>In Vivo</b>	<sup>18</sup> F-MNI-444 regional uptake is consistent with A <sub>2A</sub> receptor distribution in the brain. Selectivity is demonstrated by dose-dependent blocking by tozadenant (1.5, 10.5 mg/kg) and preladenant <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Molecules. 2019 Apr 2;24(7):1295 .
- PLoS One. 2016 Nov 11;11(11):e0166415.
- PLoS One. 2016 Nov 11;11(11):e0166415.

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

## REFERENCES

[1]. Olivier Barret, et al. Adenosine 2A Receptor Occupancy by Tozadenant and Preladenant in Rhesus Monkeys. J Nucl Med. 2014 Oct;55(10):1712-8.

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

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