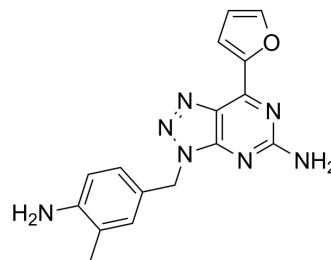


## Vipadenant

<b>Cat. No.:</b>	HY-10857		
<b>CAS No.:</b>	442908-10-3		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>15</sub> N <sub>7</sub> O		
<b>Molecular Weight:</b>	321.34		
<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

#### In Vitro

DMSO : 31 mg/mL (96.47 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.1120 mL	15.5598 mL	31.1197 mL
5 mM	0.6224 mL	3.1120 mL	6.2239 mL
10 mM	0.3112 mL	1.5560 mL	3.1120 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Vipadenant (BIIB-014; CEB-4520) is an adenosine receptor antagonist, with K<sub>i</sub>s of 1.3 nM and 68 nM for A<sub>2A</sub> and A<sub>1</sub>, respectively.

#### IC<sub>50</sub> & Target

K<sub>i</sub>: 1.3 nM (A<sub>2A</sub>), 68 nM (A<sub>1</sub>)<sup>[1]</sup>, 1005 nM (A<sub>3</sub>)<sup>[2]</sup>

#### In Vivo

Vipadenant (0.3-30 mg/kg) produces a dose-dependent reduction in catalepsy. Vipadenant (10 mg/kg) does not produce any statistically significant dyskinetic episodes in 6-OHDA-lesioned rats during a 19-day dosing regimen<sup>[1]</sup>. In the mouse and rat haloperidol-induced hypolocomotion models, vipadenant has a minimum effective dose of 0.1 and 1 mg/kg, respectively. Vipadenant (3 and 10 mg/kg, p.o.) is able to increase contralateral rotations in 6-OHDA lesioned rats<sup>[2]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

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- Pharmaceuticals. 2018 Dec 3;10(4). pii: E260.

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## REFERENCES

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- [1]. Jones N, et al. A2A receptor antagonists do not induce dyskinesias in drug-naive or L-dopa sensitized rats. Brain Res Bull. 2013 Sep;98:163-9.
- [2]. Brian C. Shook, et al. Adenosine A2A Receptor Antagonists and Parkinson's Disease. ACS Chem Neurosci. 2011 Oct 19; 2(10): 555-567.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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