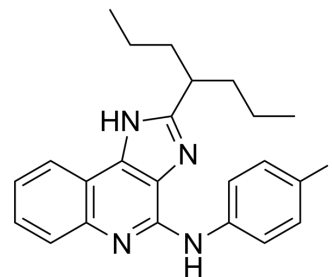


## A3AR modulator 1

Cat. No.:	HY-151899
Molecular Formula:	C <sub>23</sub> H <sub>25</sub> N <sub>4</sub>
Molecular Weight:	484.38
Target:	Adenosine Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	A3AR modulator 1 (MRS8054) is an orally active A3 adenosine receptor (A3AR) (Adenosine Receptor) positive allosteric modulator (PAM). A3AR modulator 1 greatly enhances Cl-IB-MECA-stimulated [ <sup>35</sup> S]GTPγS binding E <sub>max</sub> <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Adenosine A <sub>3</sub> receptor
<b>In Vitro</b>	A3AR modulator 1 (compound 39) shows a few weak off-target interactions, with K <sub>i</sub> values of 0.123 μM, 0.891 μM, and 2.6 μM for translocator protein (TSPO), opioid receptor σ <sub>2</sub> , and 5HT <sub>2B</sub> receptor, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	In fasted Wistar rats, A3AR modulator 1 (compound 39) has considerably longer in vivo half-life and improved oral bioavailability (3.44 h, 64.0%F at 3 mg/kg; 3.84 h, 61.5%F at 10 mg/kg), indicating substantial oral bioavailability <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Lucas B Fallot, et al. Structure-Activity Studies of 1 H-Imidazo[4,5- c]quinolin-4-amine Derivatives as A3 Adenosine Receptor Positive Allosteric Modulators. J Med Chem. 2022 Nov 24;65(22):15238-15262.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA