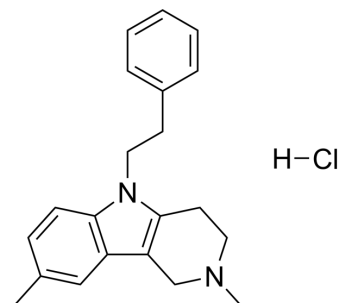


## AVN-101 hydrochloride

<b>Cat. No.:</b>	HY-117046A
<b>CAS No.:</b>	1061354-48-0
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>25</sub> ClN <sub>2</sub>
<b>Molecular Weight:</b>	340.89
<b>Target:</b>	5-HT Receptor; Histamine Receptor; Adrenergic Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Immunology/Inflammation
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	AVN-101 hydrochloride is a potent, brain-penetrant and orally active 5-HT <sub>7</sub> receptor antagonist (K <sub>i</sub> of 153 pM), with slightly lesser potency toward 5-HT <sub>6</sub> , 5-HT <sub>2A</sub> , and 5HT-2C receptors (K <sub>i</sub> values of 2.04 nM, 1.56 nM, and 1.17 nM, respectively). AVN-101 hydrochloride also exhibits a rather high affinity toward histamine H <sub>1</sub> (K <sub>i</sub> of 0.58 nM) and adrenergic α <sub>2A</sub> , α <sub>2B</sub> , and α <sub>2C</sub> (K <sub>i</sub> = 0.41-3.6 nM) receptors. AVN-101 hydrochloride can be studied in such diseases as general anxiety disorders, depression, schizophrenia, and multiple sclerosis <sup>[1]</sup> .			
<b>IC<sub>50</sub> &amp; Target</b>	5-HT <sub>7</sub> Receptor 0.153 nM (K <sub>i</sub> )	5-HT <sub>2C</sub> Receptor 1.17 nM (K <sub>i</sub> )	5-HT <sub>2A</sub> Receptor 1.56 nM (K <sub>i</sub> )	5-HT <sub>6</sub> Receptor 2.04 nM (K <sub>i</sub> )
	5-HT <sub>2B</sub> Receptor 10.6 nM (K <sub>i</sub> )	5-HT <sub>1A</sub> Receptor 61 nM (K <sub>i</sub> )	5-HT <sub>1B</sub> Receptor 720 nM (K <sub>i</sub> )	H <sub>1</sub> Receptor 0.58 nM (K <sub>i</sub> )
	Alpha-2B adrenergic receptor 0.41 nM (K <sub>i</sub> )	Alpha-2A adrenergic receptor 1.77 nM (K <sub>i</sub> )	Alpha-2C adrenergic receptor 3.55 nM (K <sub>i</sub> )	Alpha-1B adrenergic receptor 9.4 nM (K <sub>i</sub> )
	Alpha-1A adrenergic receptor 18.9 nM (K <sub>i</sub> )	Alpha-1D adrenergic receptor 30.2 nM (K <sub>i</sub> )		

### REFERENCES

[1]. Alexandre V Ivachtchenko, et al. AVN-101: A Multi-Target Drug Candidate for the Treatment of CNS Disorders. J Alzheimers Dis. 2016 May 25;53(2):583-620.

**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