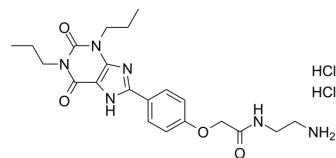


## Xanthine amine congener dihydrochloride

<b>Cat. No.:</b>	HY-110303
<b>CAS No.:</b>	1962928-23-9
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>30</sub> Cl <sub>2</sub> N <sub>6</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	501.41
<b>Target:</b>	Adenosine Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Xanthine amine congener dihydrochloride (XAC dihydrochloride) is a potent Adenosine A1 receptor and A2 receptor antagonist with IC <sub>50</sub> values of 1.8 and 114 nM, respectively. Xanthine amine congener acts as a convulsant agent in mice model <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 1.8 nM (Adenosine A1 receptor) IC <sub>50</sub> : 114 nM (Adenosine A2 receptor) <sup>[1]</sup>								
<b>In Vivo</b>	<p>Xanthine amine congener dihydrochloride is more potent as a convulsant than either caffeine or theophyllin in infusion studies at the dosage 39.8 mg/kg. XAC has no effects by administering the drug via an i.p. injection, the seizure threshold &gt;1000 mg/kg<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>39.8 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Infusion injection; single dose</td> </tr> <tr> <td>Result:</td> <td>Acted as a convulsant agent than either caffeine or theophyllin.</td> </tr> </table>	Animal Model:	Mice <sup>[1]</sup>	Dosage:	39.8 mg/kg	Administration:	Infusion injection; single dose	Result:	Acted as a convulsant agent than either caffeine or theophyllin.
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Dosage:	39.8 mg/kg								
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Result:	Acted as a convulsant agent than either caffeine or theophyllin.								

### REFERENCES

[1]. P F Morgan, et al. Potent Convulsant Actions of the Adenosine Receptor Antagonist, Xanthine Amine Congener (XAC). Life Sci. 1989;45(8):719-28

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**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](mailto:tech@MedChemExpress.com)

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