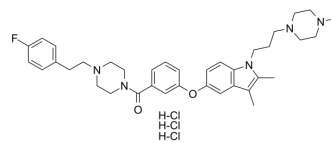


## ATM-3507 trihydrochloride

<b>Cat. No.:</b>	HY-100948B
<b>CAS No.:</b>	2438679-30-0
<b>Molecular Formula:</b>	C <sub>37</sub> H <sub>49</sub> Cl <sub>3</sub> FN <sub>5</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	721.17
<b>Target:</b>	Myosin
<b>Pathway:</b>	Cytoskeleton
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<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: ≥ 2.08 mg/mL (2.88 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (2.88 mM); Clear solution</li> </ol>
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### BIOLOGICAL ACTIVITY

<b>Description</b>	ATM-3507 trihydrochloride is a potent tropomyosin inhibitor with IC <sub>50</sub> s from 3.83-6.84 μM in human melanoma cell lines.
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 3.83-6.84 μM (tropomyosin, in human melanoma celllines) <sup>[1]</sup> .
<b>In Vivo</b>	<p>The maximal tolerance dose (MTD) for TR100 and ATM-3507 is 60 and 150 mg/kg, respectively. It is found that a significant inhibition of tumor growth and prolongation of animal survival using either combination compared with each monotherapy. The median survival of mice increased from 18 days for mice treated with ATM-3507 to more than 49 days for mice treated with the combination. It is also found that twice weekly intravenous administration of ATM-3507 also show combination efficacy. The impact of each treatment or the combination on body weight is minimal. Drug levels are measured following the intravenous administration of ATM-3507 at 30 mg/kg in Balb/c mice (n=3 per time point). The mean half-life of ATM-3507 is 5.01 hrs for the terminal elimination phase. The mean AUC<sub>0-t</sub> in the plasma is 14,548 ng/h/mL. The C<sub>max</sub> of ATM-3507 is 5,758 ng/mL and the t<sub>1/2</sub> is 5.01 h. The observed plasma clearance and volume of distribution at steady state of ATM-3507 is 33.8 mL/min/kg and 7.23 L/kg, respectively<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Currier MA, et al. Identification of Cancer-Targeted Tropomyosin Inhibitors and Their Synergy with Microtubule Drugs. Mol Cancer Ther. 2017 Aug;16(8):1555-1565.

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

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