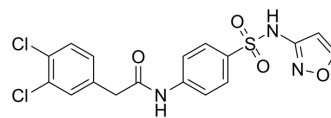


## ML251

<b>Cat. No.:</b>	HY-12607		
<b>CAS No.:</b>	1486482-16-9		
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>13</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	426.27		
<b>Target:</b>	Parasite		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 250 mg/mL (586.48 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.3459 mL	11.7297 mL	23.4593 mL
		5 mM	0.4692 mL	2.3459 mL	4.6919 mL
10 mM		0.2346 mL	1.1730 mL	2.3459 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.08 mg/mL (4.88 mM); Suspended solution; Need ultrasonic  2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.88 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	ML251, a potent nanomolar <i>T. brucei</i> and <i>T. cruzi</i> phosphofructokinase (PFK) inhibitor, inhibits <i>T. brucei</i> PFK (IC <sub>50</sub> =0.37 μM) and <i>T. cruzi</i> PFK (IC <sub>50</sub> =0.13 μM). ML251 can be used for the research of parasite <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 0.37 μM ( <i>T. brucei</i> PFK) <sup>[1]</sup> . IC <sub>50</sub> : 0.13 μM ( <i>T. cruzi</i> PFK) <sup>[1]</sup>
<b>In Vitro</b>	ML251 ( <i>T. brucei</i> ; 0~33.3 μg/mL) produces modest dose-dependent toxicity <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Cytotoxicity Assay <sup>[1]</sup>

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Cell Line:	T. brucei
Concentration:	0~33.3 µg/mL
Incubation Time:	
Result:	Dose-dependent reduction of cell viability.

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## REFERENCES

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[1]. Brimacombe KR, et al. Identification of ML251, a Potent Inhibitor of T. brucei and T. cruzi Phosphofructokinase. ACS Med Chem Lett. 2013;5(1):12-17.

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

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