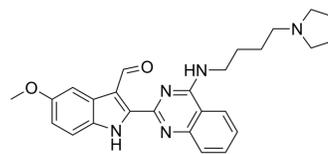


## IQZ23

Cat. No.:	HY-133556
CAS No.:	2415643-79-5
Molecular Formula:	C <sub>26</sub> H <sub>29</sub> N <sub>5</sub> O <sub>2</sub>
Molecular Weight:	443.54
Target:	AMPK
Pathway:	Epigenetics; PI3K/Akt/mTOR
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	IQZ23 inhibits adipocyte differentiation via AMPK pathway activation. IQZ23 exerts a high efficacy in decreasing the triglyceride level (EC <sub>50</sub> =0.033 μM) in 3T3-L1 adipocytes. IQZ23 could be used for the research of obesity and related metabolic disorders <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	AMPK									
<b>In Vitro</b>	<p>IQZ23 activates AMPK pathway by modulating ATP synthase activity<sup>[1]</sup>.</p> <p>IQZ23 (0.3 and 1.0 μM) markedly decreases the protein level of adipogenic factors C/EBPα, PPARγ, and sterol regulatory element-binding protein 1c (SREBP-1c) after 24 h treatment as well as the level of fatty acid synthesis related proteins fatty acid synthase (FAS), acetyl CoA carboxylase (ACC), stearoyl-CoA desaturase 1 (SCD1) after 6 days of treatment in 3T3-L1 adipocytes<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>3T3-L1 adipocytes</td> </tr> <tr> <td>Concentration:</td> <td>0.3 and 1.0 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Decreased the protein level of adipogenic factors C/EBPα, PPARγ, and SREBP-1c.</td> </tr> </table>		Cell Line:	3T3-L1 adipocytes	Concentration:	0.3 and 1.0 μM	Incubation Time:	24 hours	Result:	Decreased the protein level of adipogenic factors C/EBPα, PPARγ, and SREBP-1c.
Cell Line:	3T3-L1 adipocytes									
Concentration:	0.3 and 1.0 μM									
Incubation Time:	24 hours									
Result:	Decreased the protein level of adipogenic factors C/EBPα, PPARγ, and SREBP-1c.									
<b>In Vivo</b>	<p>IQZ23 (20 mg/kg, i.p.) treatment significantly reverses high fat and cholesterol diet (HFC)- induced body weight increases and accompanying clinical symptoms of obesity in mice but without indicative toxicity<sup>[1]</sup>.</p> <p>IQZ23 exhibits moderate terminal elimination half-lives (rat 4.2±0.3 h) and C<sub>max</sub> (rat 37.1±7.0 ng/mL) following oral administration (rat 5 mg/kg)<sup>[1]</sup>.</p> <p>IQZ23 exhibits terminal elimination half-lives (rat 4.4±0.4 h) following intravenous administration (rat 2 mg/kg)<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>									

### REFERENCES

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

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