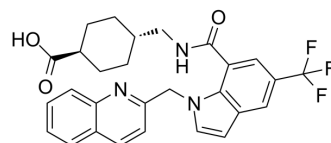


## ASP7657 free base

<b>Cat. No.:</b>	HY-120598
<b>CAS No.:</b>	1196045-28-9
<b>Molecular Formula:</b>	C <sub>28</sub> H <sub>26</sub> F <sub>3</sub> N <sub>3</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	509.52
<b>Target:</b>	Prostaglandin 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>	ASP7657 free base is an orally active EP4 receptor antagonist, with K <sub>s</sub> of 2.21 and 6.02 nM for the human and rat EP4 receptors <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	hEP4 2.21 nM (IC <sub>50</sub> )	rat EP4 6.02 nM (IC <sub>50</sub> )								
<b>In Vitro</b>	ASP7657 free base inhibits the PGE2-induced cAMP increase in CHO cells (expressing rat EP4 receptors) and human lymphoblastoid T cells, with IC <sub>50</sub> values of 0.86 nM and 0.29 nM, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.									
<b>In Vivo</b>	<p>ASP7657 free base (0.1 mg/kg, p.o., rats) shows a t<sub>1/2</sub> of 1.38 h, C<sub>max</sub> of 22.4 ng/mL, and oral bioavailability of 46.2%<sup>[1]</sup>.</p> <p>ASP7657 free base (0.003-0.1 mg/kg, p.o.) inhibits LPS (1 µg/mL)-induced TNF-α release from rat whole blood<sup>[1]</sup>.</p> <p>ASP7657 free base (0.01 mg/kg, p.o.) attenuates urinary albumin excretion in type 2 diabetic mice<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Animal Model:</td> <td>LPS (1 µg/mL)-induced rats<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>0.003, 0.01, 0.03, 0.1 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>p.o.</td> </tr> <tr> <td>Result:</td> <td>Antagonized the PGE2-mediated inhibition of LPS-induced TNF-α release from rat whole blood culture, in a dose-dependent way.</td> </tr> </table>		Animal Model:	LPS (1 µg/mL)-induced rats <sup>[1]</sup>	Dosage:	0.003, 0.01, 0.03, 0.1 mg/kg	Administration:	p.o.	Result:	Antagonized the PGE2-mediated inhibition of LPS-induced TNF-α release from rat whole blood culture, in a dose-dependent way.
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### REFERENCES

[1]. Mizukami K, et al. Pharmacological properties of ASP7657, a novel, potent, and selective prostaglandin EP4 receptor antagonist. Naunyn Schmiedebergs Arch Pharmacol. 2018 Dec;391(12):1319-1326.

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

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