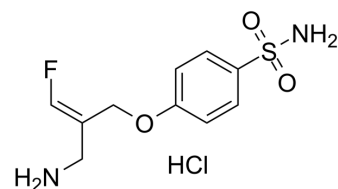


## PXS-4681A

<b>Cat. No.:</b>	HY-117833
<b>CAS No.:</b>	1478364-87-2
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>14</sub> ClFN <sub>2</sub> O <sub>3</sub> S
<b>Molecular Weight:</b>	296.75
<b>Target:</b>	Monoamine Oxidase
<b>Pathway:</b>	Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PXS-4681A is a potent, selective, irreversible and orally active semicarbazide-sensitive amine oxidase (SSAO; VAP-1) inhibitor with a K <sub>i</sub> of 37 nM. PXS-4681A shows highly selectivity over related amine oxidases, ion channels, and seven-transmembrane domain receptors. PXS-4681A has anti-inflammatory effects <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	Ki: 37 nM (SSAO) <sup>[1]</sup>								
<b>In Vitro</b>	PXS-4681A is an inhibitor of SSAO/VAP-1 in human, rat, mouse, rabbit, and dog species with IC <sub>50</sub> values of 3 nM, 3 nM, 2 nM, 9 nM and 3nM, respectively <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	<p>PXS-4681A (2 mg/kg; PO; single dose) attenuates neutrophil migration, tumor necrosis factor-α, and interleukin-6 levels in mouse models of lung inflammation and localized inflammation<sup>[1]</sup>.</p> <p>In rats, PXS-4681A is well absorbed with good bioavailability and oral half-life at the 10 mg/kg i.v. dose and the 20 mg/kg PO dose. Similarly, in BALB/C mice, PXS-4681A is well absorbed with good bioavailability and oral half-life at 2 mg/kg in both intravenous and oral studies<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>Carrageenan-induced skin inflammation mice<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>2 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>oral administration; single dose</td> </tr> <tr> <td>Result:</td> <td>Reduced local inflammation, causing a significant reduction in exudate volume by 25%.</td> </tr> </table>	Animal Model:	Carrageenan-induced skin inflammation mice <sup>[1]</sup>	Dosage:	2 mg/kg	Administration:	oral administration; single dose	Result:	Reduced local inflammation, causing a significant reduction in exudate volume by 25%.
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### REFERENCES

[1]. Jonathan S Foot, et al. PXS-4681A, a potent and selective mechanism-based inhibitor of SSAO/VAP-1 with anti-inflammatory effects in vivo. J Pharmacol Exp Ther. 2013 Nov;347(2):365-74.

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

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