

## **Product** Data Sheet

## WAY-181187 hydrochloride

Cat. No.: HY-W746031 CAS No.: 554403-08-6

Molecular Formula:  $C_{15}H_{14}Cl_2N_4O_2S_2$ 

Molecular Weight: 417.33

Target: 5-HT Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

$$NH_2$$

$$\begin{array}{c}
N \\
N \\
O = S = O \\
CI \\
N \\
N \\
S
\end{array}$$
H-CI

## **BIOLOGICAL ACTIVITY**

Description	WAY-181187 (SAX-187) hydrochloride is a potent and selective full 5-HT6 receptor agonist with a $K_i$ of 2.2 nM and an EC <sub>50</sub> of 6.6 nM <sup>[1]</sup> . WAY-181187 hydrochloride mediates 5-HT6 receptor-dependent signal pathways, such as cAMP, Fyn and ERK1/2 kinase, as specific agonist <sup>[2]</sup> .	
IC <sub>50</sub> & Target	5-HT <sub>6</sub> Receptor 2.2 nM (Ki)	5-HT <sub>6</sub> Receptor 6.6 nM (EC50)
In Vitro	WAY-181187 (1 and 10 $\mu$ M) hydrochloride increases activation of ERK1/2. WAY-181187 hydrochloride also increases Fyn kinase activity <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Acute administration of WAY-181187 (3-30 mg/kg, s.c.) hydrochloride significantly increases extracellular GABA concentrations without altering the levels of glutamate or norepinephrine in the rat frontal cortex. Additionally, WAY-181187 (30 mg/kg, s.c.) hydrochloride produces modest yet significant decreases in cortical dopamine and 5-HT levels <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Adult male Sprague-Dawley rats weighing 280-350 g <sup>[1]</sup>
	Dosage:	3, 10, or 30 mg/kg
	Administration:	Acute dministered by s.c.
	Result:	Significantly increased extracellular GABA concentrations without altering the levels of glutamate or norepinephrine.

## **REFERENCES**

[1]. Lee E Schechter, et al. Neuropharmacological Profile of Novel and Selective 5-HT6 Receptor Agonists: WAY-181187 and WAY-208466. Neuropsychopharmacology. 2008 May;33(6):1323-35.

[2]. Teresa Riccioni, et al. ST1936 Stimulates cAMP, Ca2+, ERK1/2 and Fyn Kinase Through a Full Activation of Cloned Human 5-HT6 Receptors. Eur J Pharmacol. 2011 Jul 1;661(1-3):8-14.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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