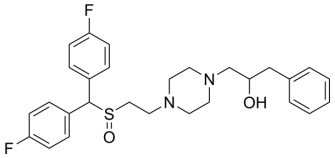
JJC8-088

Cat. No.:	HY-158013
CAS No.:	1627576-82-2
Molecular Formula:	$C_{28}H_{32}F_2N_2O_2S$
Molecular Weight:	498.63
Target:	Dopamine Transporter
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	JJC8-088 is a potent inhibitor of DAT. JJC8-088 is a novel Modafinil-derived ligands. JJC8-088 can be used to study psychostimulant use disorders[1].
IC_{50} & Target	DAT 2.53 nM (Ki)
In Vivo	JJC8-088 (3-30 mg/kg, i.p., 30/120 min) can effectively reduce the compulsive self-administration of methamphetamine in rats and increase the amount of exercise[1]. JJC8-088 (0-30 mg/kg, i.p., 30 min prior to testing) can cause a large and rapid increase in extracellular Dopamine (DA) (HY-B0451) levels in rats with history of Cocaine self-administration[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	METH addict male Wistar rats (6-8 weeks old; weighing 200-250 g)[1]
Dosage:	0/3/10/30 mg/kg
Administration:	i.p.
Result:	The half-life of JJC8-088 is 39 min. Presented low levels in both brain and plasma.

REFERENCES

[1]. Tunstall BJ, et al. Atypical dopamine transporter inhibitors attenuate compulsive-like methamphetamine self-administration in rats. Neuropharmacology. 2018 Mar 15;131:96-103.

[2]. Newman AH, et al. Translating the atypical dopamine uptake inhibitor hypothesis toward therapeutics for treatment of psychostimulant use disorders. Neuropsychopharmacology. 2019 Jul;44(8):1435-1444.

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

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