Product Datasheet

Liafensine

Catalog No. **BP-08783** · CAS **1198790-53-2** · Form **free base** · Physical state **solid** · Color **Light yellow to brown** · Version **1.0** · Revision **2026-11-13**

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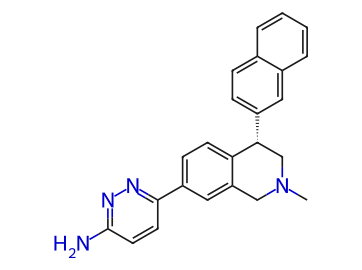
Target	Research area
Dopamine Transporter; Monoamine Transporter; Serotonin Transporter	**Neurological Disease**

Molecular formula	$C_{24}H_{22}N_4$
Molecular weight	**366.4680**

STRUCTURE



DESCRIPTION

Liafensine (BMS-820836) is an orally active, blood-brain barrier-permeable monoamine reuptake inhibitor, with an IC50 of 5.67 nM against DAT, 1.08 nM against SERT, and 7.99 nM against NET. Liafensine binds to DAT to block dopamine reuptake. Liafensine binds to SERT to block serotonin reuptake. Liafensine binds to NET to block norepinephrine reuptake. Liafensine can be used in studies related to depression .

BIOLOGICAL ACTIVITY

Liafensine potently inhibits monoamine reuptake in embryonic kidney 293 cells expressing SERT, DAT and NET, with IC50 values of 1.08 nM, 5.67 nM and 7.99 nM, respectively

REFERENCES

[1]. Risinger R, et al. Evaluation of safety and tolerability, pharmacokinetics, and pharmacodynamics of BMS-820836 in healthy subjects: a placebo-controlled, ascending single-dose study. Psychopharmacology (Berl). 2014 Jun;231(11):2299-310.

[2]. Bhagwagar Z, et al. Assessment of the Efficacy and Safety of BMS-820836 in Patients With Treatment-Resistant Major Depression: Results From 2 Randomized, Double-Blind Studies. J Clin Psychopharmacol. 2015 Aug;35(4):454-9.