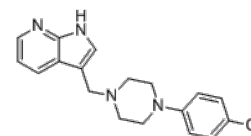


Product Name : L-745870
Cat. No. : PC-21106
CAS No. : 158985-00-3
Molecular Formula : C₁₈H₁₉ClN₄
Molecular Weight : 326.83
Target : Dopamine Receptor
Solubility : 10 mM in DMSO



Biological Activity

L-745870 (L-745,870) is a potent, selective, brain-penetrant and orally active dopamine D4 receptor (D4R) antagonist with K_i of 0.43 nM.

L-745870 is >100-fold selective for D4R over other dopamine receptors (D1R, D2R, D3R, and D5R) with subnanomolar affinity.

L-745870 blocks the inhibition of forskolin-stimulated adenylate cyclase activity in transfected human embryonic kidney (HEK293) and Chinese hamster ovary (CHO) cells.

L-745870 blocks dopamine-induced inhibition of Ca²⁺ currents in transfected GH4C1 pituitary cells.

L745870 (10 mg/kg p.o.) induces mild sedation and extrapyramidal motor symptoms, notably bradykinesia.

References

Patel S, et al. J Pharmacol Exp Ther. 1997 Nov;283(2):636-47.

Bristow LJ, et al. Trends Pharmacol Sci. 1997 Jun;18(6):186-8.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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