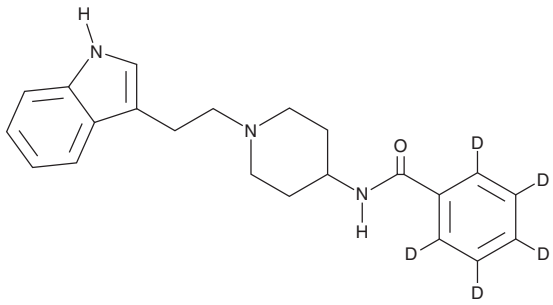
PRODUCT INFORMATION

Indoramin-d_5

Item No. 45855

CAS Registry No.:	57165-41-0
Formal Name:	N-[1-[2-(1H-indol-3-yl)ethyl]-4-piperidinyl]-benzamide-2,3,4,5,6-d_5
MF:	$C_{22}H_{20}D_5N_3O$
FW:	352.5
Chemical Purity:	≥98% (Indoramin)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
Supplied as:	A 1 mg/ml solution in methanol
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Indoramin-d_5 is intended for use as an internal standard for the quantification of indoramin by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Description

Indoramin is an antagonist of α_1-adrenergic receptors (α_1-ARs; K_is = 5, 10, and 50 nM for the human α_{1A}-, α_{1B}-, and α_{1D}-ARs, respectively).[1] It also binds to α_{1L}-ARs (pA_2 = 8.5) and inhibits norepinephrine and serotonin (5-HT) uptake in rat brain cortical slices (IC_{50} = 2 µM for both).[2,3] Indoramin (5 mg/kg) decreases blood pressure in normotensive anesthetized rats.[4] Intrathecal administration of indoramin decreases micturition pressure and increases bladder capacity and micturition volume in conscious rats.[5] Formulations containing indoramin have been used in the treatment of urinary outflow obstruction in patients with benign prostatic hyperplasia.

References

1. Kenny, B.A., Miller, A.M., Williamson, I.J.R., *et al.* Evaluation of the pharmacological selectivity profile of α_1 adrenoceptor antagonists at prostatic α_1 adrenoceptors: Binding, functional and *in vivo* studies. *Br. J. Pharmacol.* **118(4),** 871-878 (1996).
2. Ford, A.P.D.W., Arrendondo, N.F., Blue, D.R., Jr., *et al.* RS-17053 (*N*-[2-(2-cyclopropylmethoxyphenoxy) ethyl]-5-chloro-α, α-dimethyl-1*H*-indole-3-ethanamine hydrochloride), a selective α_{1A}-adrenoceptor antagonist, displays low affinity for functional α_1-adrenoceptors in human prostate: Implications for adrenoceptor classification. *Mol. Pharmacol.* **49(2),** 209-215 (1996).
3. Sugden, R.F. The action of indoramin and other compounds on the uptake of neurotransmitters into rat cortical slices. *Br. J. Pharmacol.* **51(3),** 467-469 (1974).
4. Archibald, J.L., Alps, B.J., Cavalla, J.F., *et al.* Synthesis and hypotensive activity of benzamidopiperidylethylindoles. *J. Med. Chem.* **14(11),** 1054-1059 (1971).
5. Ishizuka, O., Pandita, R.K., Mattiasson, A., *et al.* Stimulation of bladder activity by volume, L-dopa and capsaicin in normal conscious rats - effects of spinal α_1-adrenoceptor blockade. *Naunyn Schmiedebergs Arch. Pharmacol.* **355(6),** 787-793 (1997).

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