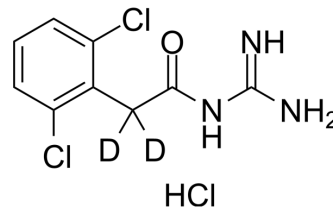


Guanfacine-d₂ hydrochloride

Cat. No.:	HY-17416S
CAS No.:	1398065-88-7
Molecular Formula:	C ₉ H ₈ D ₂ Cl ₃ N ₃ O
Molecular Weight:	284.57
Target:	Adrenergic Receptor; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Guanfacine-d ₂ (hydrochloride) is the deuterium labeled Guanfacine hydrochloride. Guanfacine hydrochloride, an anti-hypertensive agent, is a selective α _{2A} -adrenoceptor agonist with K _d of 31 nM and displays 60-fold selectivity over α _{2B} -adrenoceptors ^{[1][2]} .
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Wang J, et al. Huperzine a improves chronic inflammation and cognitive decline in rats with cerebral hypoperfusion. *J Neurosci Res*. 2010 Mar;88(4):807-15.
- [2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

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

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