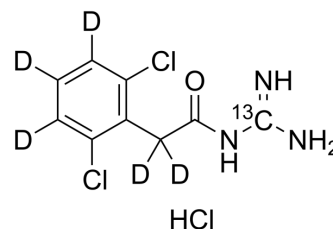


## Guanfacine-<sup>13</sup>C,<sub>5</sub>D hydrochloride

Cat. No.:	HY-17416S2
Molecular Formula:	C <sub>8</sub> <sup>13</sup> CH <sub>5</sub> D <sub>5</sub> Cl <sub>3</sub> N <sub>3</sub> O
Molecular Weight:	288.58
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-<sup>13</sup>C,<sub>5</sub>D hydrochloride is the deuterium and <sup>13</sup>C labeled Guanfacine hydrochloride (HY-17416). Guanfacine hydrochloride is an orally active noradrenergic α<sub>2A</sub> agonist and has high selectivity for the α<sub>2A</sub> receptor subtype. Guanfacine has effects in producing hypotension and sedation. Guanfacine can be used for the research of a variety of prefrontal cortex (PFC) cognitive disorders, including tourette's syndrome and attention deficit hyperactivity disorder (ADHD)<sup>[1][2][3]</sup>.

### REFERENCES

- [1]. Arnsten AF, et al. Guanfacine for the treatment of cognitive disorders: a century of discoveries at Yale. *Yale J Biol Med.* 2012 Mar;85(1):45-58. Epub 2012 Mar 29.
- [2]. Van Zwieten PA, et al. The pharmacology of centrally acting antihypertensive drugs. *Br J Clin Pharmacol.* 1983;15(Suppl 4):455S-462S.
- [3]. Wang M, et al. Alpha<sub>2A</sub>-adrenoceptors strengthen working memory networks by inhibiting cAMP-HCN channel signaling in prefrontal cortex. *Cell.* 2007 Apr 20;129(2):397-410.

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

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