

Product Data Sheet

Product Name: Tryptamine-d4 (hydrochloride)

Cat. No.: GC48930

Chemical Properties

Cas. No. 340257-60-5

SMILES NC([2H])([2H])C([2H])([2H])C1=CNC2=CC=CC=C12.Cl

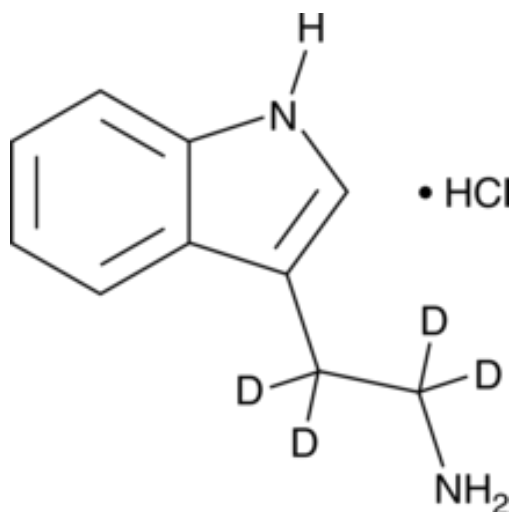
Formula C₁₀H₈D₄N₂•HCl M.Wt 200.7

Solubility DMSO: slightly, heated, Methanol: slightly soluble, Water: slightly soluble
Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Tryptamine-d₄ is intended for use as an internal standard for the quantification of tryptamine by GC- or LC-MS. Tryptamine is an indole alkaloid and intermediate in the biosynthesis of serotonin and the phytohormone melatonin in plants.^{1,2} It increases levels of the terpenoid indole alkaloids ajmalicine, strictosidine, and catharanthine in cultures of *C. roseus*.³ Tryptamine is also a product of tryptophan metabolism in mammals.⁴ Tryptamine derivatives have been synthetically produced as

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

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hallucinogenic drugs of abuse that act on the serotonergic system.⁵

1. Arnao, M.B. Phytomelatonin: Discovery, content, and role in plants *Adv. Bot.* 2014:815769(2014)
2. Fan, J., Xie, Y., Zhang, Z., et al. Melatonin: A multifunctional factor in plants *Int. J. Mol. Sci.* 19(5)E1528(2018)
3. Almagro, L., Fernández-Pérez, F., and Pedreño, M.A. Indole alkaloids from *Catharanthus roseus*: Bioproduction and their effect on human health *Molecules* 20(2)2973-3000(2015)
4. Berumen, L.C., Rodríguez, A., Miledi, R., et al. Serotonin receptors in hippocampus *Sci. World J.* 2012:823493(2012)
5. Araujo, A.M., Carvalho, F., Bastos, M.L., et al. The hallucinogenic world of tryptamines: An updated review *Arch. Toxicol.* 89(8)1151-1173(2015)

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