

Product Data Sheet

Product Name: Tropisetron-d5

Cat. No.: GC48208

Chemical Properties

Cas. No. 1220284-86-5

SMILES CN1[C@@H]2C[C@@H](OC(C3=C([2H])NC4=C3C([2H])=C([2H])C([2H])=C4[2H])=O)C[C@H]1CC2

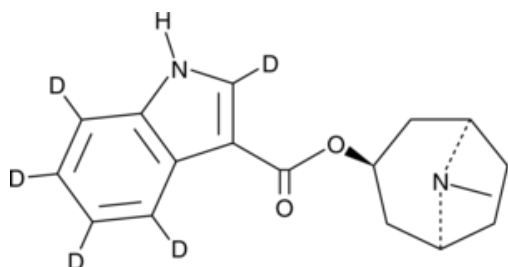
Formula C₁₇H₁₅D₅N₂O₂ M.Wt 289.4

Solubility DMSO: slightly soluble, Methanol: slightly soluble Storage Store at -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

Tropisetron-d₅ is intended for use as an internal standard for the quantification of tropisetron by GC- or LC-MS. Tropisetron is an orally bioavailable antagonist of the serotonin (5-HT) receptor subtype 5-HT₃ ($K_i = 5.3$ nM).^{1,2} It is also an antagonist of the α_9 nicotinic acetylcholine receptor (nAChR; IC₅₀ = 166 nM) and a partial agonist of the α_7 nAChR ($K_i = 6.9$ nM).^{3,4}

1. Mawe, G.M., Branchek, T.A., and Gershon, M.D. Peripheral neural serotonin receptors: Identification and characterization with specific antagonists and agonists Proc. Natl. Acad. Sci. USA 83(24):9799-9803 (1986) 2. Round, A., and Wallis, D.I. The depolarizing action of 5-hydroxytryptamine on rabbit vagal afferent and sympathetic neurones in vitro and its selective

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

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blockade by ICS 205-930Br. J. Pharmacol.88(2)485-494(1986) 3.Shiina, A., Shirayama, Y., Niitsu, T., et al.A randomised, double-blind, placebo-controlled trial of tropisetron in patients with schizophreniaAnn. Gen. Psychiatry9(27)(2010) 4.Rothlin, C.V., Katz, E., Verbitsky, M., et al.The α 9 nicotinic acetylcholine receptor shares pharmacological properties with type A γ -aminobutyric acid, glycine, and type 3 serotonin receptorsMol. Pharmacol.55(2)248-254(1999)

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