
Product Data Sheet

Product Name: Alosetron-13C,d3

Cat. No.: GC64265

Chemical Properties

Cas. No.

Formula C1613CH15D3N4O

M.Wt

298.36

Solubility

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

Alosetron-13C,d3 (GR 68755-13C,d3) is the 13C- and deuterium labeled Alosetron. Alosetron (GR 68755) is a potent and highly selective serotonin 5-HT₃ receptor antagonist. Alosetron is used for the research of irritable bowel syndrome (IBS). Alosetron blocks the fast 5HT₃-mediated depolarisation of guinea-pig myenteric and submucosal neurons, with IC₅₀ at ~55 nM. Alosetron attenuates the visceral nociceptive effect of rectal distension in conscious or anaesthetised dogs. Anti-inflammatory effects[1][2].

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].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216. [2]. Balfour JA, Goa KL, Perry CM. Alosetron. *Drugs.* 2000;59(3):511-520.

[3]. Motavallian A, et al. Anti-inflammatory effects of alosetron mediated through 5-HT₃ receptors on experimental colitis. *Res Pharm Sci.* 2019;14(3):228-236.

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

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