

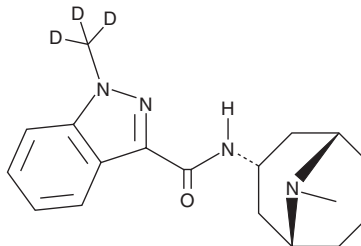
PRODUCT INFORMATION



Granisetron-d₃

Item No. 31786

CAS Registry No.: 1224925-76-1
Formal Name: 1-(methyl-d₃)-N-[(3-endo)-9-methyl-9-azabicyclo[3.3.1]non-3-yl]-1H-indazole-3-carboxamide
MF: C₁₈H₂₁D₃N₄O
FW: 315.4
Chemical Purity: ≥98% (Granisetron)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Granisetron-d₃ is intended for use as an internal standard for the quantification of granisetron (Item No. 21239) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Granisetron-d₃ is supplied as a solid. A stock solution may be made by dissolving the granisetron-d₃ in the solvent of choice, which should be purged with an inert gas. Granisetron-d₃ is soluble in methanol.

Description

Granisetron is an antagonist of the serotonin (5-HT) receptor subtype 5-HT₃ (K_i = 3.9 nM) with antiemetic activity.^{1,2} It is selective for 5-HT₃ over 5-HT₄ receptors (K_i = >1,000 nM).¹ Granisetron (0.3, 1, and 3 mg/kg, p.o.) increases the latency to a first vomiting episode and reduces the number of vomiting episodes in a canine model of emesis induced by cisplatin (Item No. 13119).² It also increases the latency to a first vomiting episode and reduces the number of vomiting and retching episodes in a ferret model of emesis induced by doxorubicin (Item No. 15007) and cyclophosphamide (Item No. 13849) when administered at doses of 0.1, 0.3, and 1 mg/kg. Formulations containing granisetron have been used in the prevention of nausea and vomiting associated with chemotherapy.

References

1. López-Rodríguez, M.L., Benhamú, B., Morcillo, M.J., *et al.* Benzimidazole derivatives. 2. Synthesis and structure-activity relationships of new azabicyclic benzimidazole-4-carboxylic acid derivatives with affinity for serotoninergic 5-HT₃ receptors. *J. Med. Chem.* **42**(24), 5020-5028 (1999).
2. Haga, K., Inaba, K., Shoji, H., *et al.* The effects of orally administered Y-25130, a selective serotonin₃-receptor antagonist, on chemotherapeutic agent-induced emesis. *Jpn. J. Pharmacol.* **63**(3), 377-383 (1993).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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