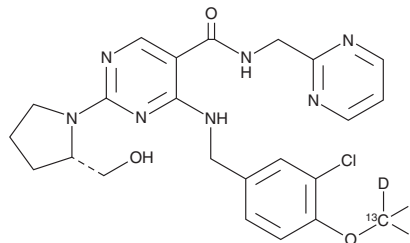


PRODUCT INFORMATION



Avanafil-¹³C-d₃ Item No. 31687

CAS Registry No.: 2738376-89-9
Formal Name: 4-[[[3-chloro-4-(methoxy-¹³C-d₃)phenyl]methyl]amino]-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-N-(2-pyrimidinylmethyl)-5-pyrimidinecarboxamide
MF: C₂₂[¹³C]H₂₃ClD₃N₇O₃
FW: 488.0
Chemical Purity: ≥98% (Avanafil)
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

Avanafil-¹³C-d₃ is intended for use as an internal standard for the quantification of avanafil (Item No. 23024) 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).

Avanafil-¹³C-d₃ is supplied as a solid. A stock solution may be made by dissolving the avanafil-¹³C-d₃ in the solvent of choice, which should be purged with an inert gas. Avanafil-¹³C-d₃ is soluble in DMSO and methanol.

Description

Avanafil is an orally bioavailable inhibitor of phosphodiesterase 5 (PDE5; IC₅₀ = 5.2 nM).^{1,2} It is selective for PDE5 over PDE6, PDE1-4, and PDE7-11 (IC₅₀s = 630, >5,000, and >5,000 nM, respectively).¹ Avanafil (300 μg/kg, i.v.) potentiates pelvic nerve stimulation-induced penile tumescence in anesthetized dogs. Formulations containing avanafil have been used in the treatment of erectile dysfunction.

References

1. Kotera, J., Mochida, H., Inoue, H., *et al.* Avanafil, a potent and highly selective phosphodiesterase-5 inhibitor for erectile dysfunction. *J. Urol.* **188**(2), 668-674 (2012).
2. Kedia, G.T., Ückert, S., Assadi-Pour, F., *et al.* Avanafil for the treatment of erectile dysfunction: Initial data and clinical key properties. *Ther. Adv. Urol.* **5**(1), 35-41 (2013).

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.

WARRANTY AND LIMITATION OF REMEDY

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