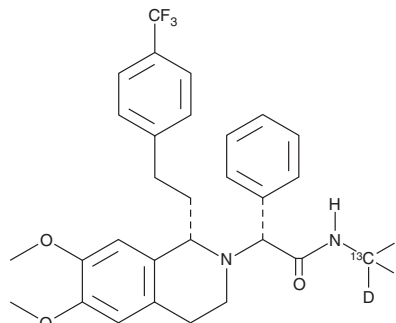


PRODUCT INFORMATION



Almorexant-¹³C-d₃ Item No. 29099

CAS Registry No.: 2738376-75-3
Formal Name: (R)-2-((S)-6,7-dimethoxy-1-(4-(trifluoromethyl)phenethyl)-3,4-dihydroisoquinolin-2(1H)-yl)-N-(methyl-¹³C-d₃)-2-phenylacetamide
Synonym: ACT 078573-¹³C-d₃
MF: C₂₈[¹³C]H₂₈D₃F₃N₂O₃
FW: 516.6
Chemical Purity: ≥98% (Almorexant)
Deuterium Incorporation: ≥98% deuterated forms (d₁-d₃); ≤2% 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

Almorexant-¹³C-d₃ is intended for use as an internal standard for the quantification of almorexant (Item No. 13638) 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).

Almorexant-¹³C-d₃ is supplied as a solid. A stock solution may be made by dissolving the almorexant-¹³C-d₃ in the solvent of choice, which should be purged with an inert gas. Almorexant-¹³C-d₃ is soluble in organic solvents such as methanol, DMSO, and dimethyl formamide.

Description

Almorexant is a dual antagonist of orexin 1 receptor (OX1R) and OX2R (K_is = 4.7 and 0.9 nM, respectively, in a radioligand binding assay).¹ It decreases the latency to persistent non-rapid eye movement (NREM) sleep and increases the duration of NREM and REM sleep in male rats when administered at a dose of 100 mg/kg.² Almorexant (300 mg/kg) does not impair spatial learning and memory in the Morris water maze and does not reverse spatial memory impairments induced by scopolamine in rats.³

References

1. Malherbe, P., Borroni, E., Pinard, E., *et al.* Biochemical and electrophysiological characterization of almorexant, a dual orexin 1 receptor (OX1)/orexin 2 receptor (OX2) antagonist: Comparison with selective OX1 and OX2 antagonists. *Molecular Pharmacology* **76**(3), 618-631 (2015).
2. Brisbare-Roch, C., Dingemans, J., Koberstein, R., *et al.* Promotion of sleep by targeting the orexin system in rats, dogs and humans. *Nat. Med.* **13**(2), 150-155 (2007).
3. Dietrich, H. and Jenck, F. Intact learning and memory in rats following treatment with the dual orexin receptor antagonist almorexant. *Psychopharmacology (Berl.)* **212**(2), 145-154 (2010).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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