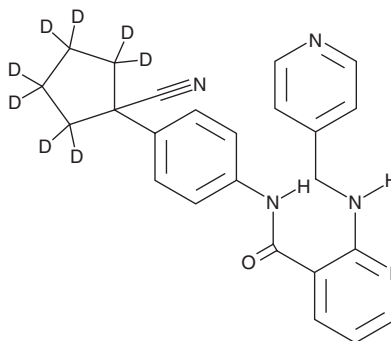


PRODUCT INFORMATION



Apatinib-d₈ Item No. 35055

CAS Registry No.: 2468771-43-7
Formal Name: N-[4-(1-cyanocyclopentyl-2,2,3,3,4,4,5,5-d₈)phenyl]-2-[(4-pyridinylmethyl)amino]-3-pyridinecarboxamide
MF: C₂₄H₁₅D₈N₅O
FW: 405.5
Chemical Purity: ≥90% (Apatinib)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤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

Apatinib-d₈ is intended for use as an internal standard for the quantification of apatinib (Item No. 21268) 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).

Apatinib-d₈ is supplied as a solid. A stock solution may be made by dissolving the apatinib-d₈ in the solvent of choice, which should be purged with an inert gas. Apatinib-d₈ is soluble in DMSO.

Description

Apatinib is a tyrosine kinase inhibitor that potently suppresses the kinase activity of vascular endothelial growth factor 2 (VEGFR2; IC₅₀ = 1 nM).¹ It is less effective against c-Kit (IC₅₀ = 429 nM), RET (IC₅₀ = 13 nM), and c-Src (IC₅₀ = 53 nM) and does not inhibit EGFR, HER2, or FGFR1 (IC₅₀s = >10 μM).¹ Apatinib has been shown to inhibit the proliferation, migration, and tube formation of human umbilical vein endothelial cells (HUVECs) stimulated by fetal bovine serum and, either alone or in combination with chemotherapeutic agents, prevents the growth of several established human tumor xenograft models.¹

Reference

1. Tian, S., Quan, H., Xie, C., *et al.* YN968D1 is a novel and selective inhibitor of vascular endothelial growth factor receptor-2 tyrosine kinase with potent activity *in vitro* and *in vivo*. *Cancer Sci.* **102(7)**, 1374-1380 (2011).

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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