



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

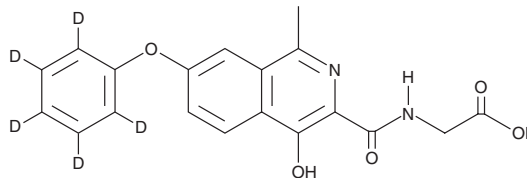
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION



Roxadustat-d₅ Item No. 34235

CAS Registry No.: 2043026-13-5
Formal Name: N-[(4-hydroxy-1-methyl-7-phenoxy-d₅-3-isoquinoliny)carbonyl]-glycine
MF: C₁₉H₁₁D₅N₂O₅
FW: 357.4
Chemical Purity: ≥98% (Roxadustat)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Roxadustat-d₅ is intended for use as an internal standard for the quantification of roxadustat (Item No. 15294) 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).

Roxadustat-d₅ is supplied as a solid. A stock solution may be made by dissolving the roxadustat-d₅ in the solvent of choice, which should be purged with an inert gas. Roxadustat-d₅ is soluble in acetone and DMSO.

Description

Roxadustat is an inhibitor of hypoxia-inducible factor prolyl hydroxylase (HIF-PH; IC₅₀s = 1.4, 1.26, and 1.32 μM for HIF-PH1, HIF-PH2, and HIF-PH3, respectively).¹ It is selective for HIF-PH over other 2-oxoglutarate-dependent dioxygenases, including lysine-specific demethylase 5A (KDM5A), KDM5B, -5C, -5D, and -6B (IC₅₀s = >100 μM for all). Roxadustat (10-200 μM) stabilizes HIF-1α and HIF-2α in Hep3B hepatocellular carcinoma cells. It increases levels of secreted erythropoietin in Hep3B cells in a concentration-dependent manner and increases erythropoiesis in rats when administered at doses of 25 and 50 mg/kg.² Roxadustat reverses anemia in a rat model of chronic inflammation induced by peptidoglycan-polysaccharide, as well as a rat model of chronic kidney disease induced by 5/6 nephrectomy. It reduces tumor growth and increases survival in a murine Lewis lung carcinoma model when administered at a dose of 3 mg/animal.³

References

1. Yeh, T.-L., Leissing, T.M., Abboud, M.I., *et al.* Molecular and cellular mechanisms of HIF prolyl hydroxylase inhibitors in clinical trials. *Chem. Sci.* **8**(11), 7651-7668 (2017).
2. Del Balzo, U., Signore, P.E., Walkinshaw, G., *et al.* Nonclinical characterization of the hypoxia-inducible factor prolyl hydroxylase inhibitor roxadustat, a novel treatment of anemia of chronic kidney disease. *J. Pharmacol. Exp. Ther.* **374**(4), 342-353 (2020).
3. Nishide, S., Matsunaga, S., Shiota, M., *et al.* Controlling the phenotype of tumor-infiltrating macrophages via the PHD-HIF axis inhibits tumor growth in a mouse model. *iScience* **19**, 940-954 (2019).

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.

Copyright Cayman Chemical Company, 05/24/2021

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM