



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

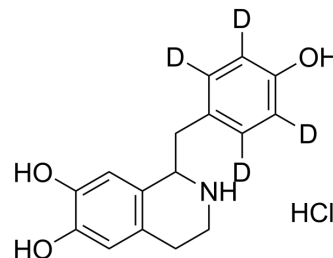
mail@szabo-scandic.com

www.szabo-scandic.com

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

Higenamine-d₄-1 hydrochloride

Cat. No.:	HY-N2037AS1
Molecular Formula:	C ₁₆ H ₁₄ D ₄ ClNO ₃
Molecular Weight:	311.8
Target:	Isotope-Labeled Compounds; MAP3K; MDM-2/p53; Apoptosis; ROS Kinase
Pathway:	Others; MAPK/ERK Pathway; Apoptosis; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Higenamine-d₄-1 (Norcoclaurine-d₄-1) hydrochloride is deuterium labeled Higenamine (hydrochloride). Higenamine hydrochloride is a selective LSD1 inhibitor (IC₅₀=1.47 μM) that can be isolated from aconite. Higenamine hydrochloride has anti-inflammatory and antibacterial activity. Higenamine (Norcoclaurine) can attenuate IL-1β-induced Apoptosis through ROS-mediated PI3K/Akt signaling pathway. Higenamine hydrochloride protects brain cells from oxygen deprivation. Higenamine can promote bone formation in osteoporosis through the SMAD2/3 pathway. Higenamine hydrochloride can be used to study cancer, inflammation, cardiorenal syndrome and other diseases^{[1][2][3][4][5][6][7]}.

REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Fang Y, et al. Discovery of higenamine as a potent, selective and cellular active natural LSD1 inhibitor for MLL-rearranged leukemia therapy. *Bioorg Chem*. 2021 Apr;109:104723.
- [3]. Ha YM, et al. Higenamine reduces HMGB1 during hypoxia-induced brain injury by induction of heme oxygenase-1 through PI3K/Akt/Nrf-2 signal pathways. *Apoptosis*. 2012 May;17(5):463-74.
- [4]. Zhu X, et al. Higenamine mitigates interleukin-1β-induced human nucleus pulposus cell apoptosis by ROS-mediated PI3K/Akt signaling. *Mol Cell Biochem*. 2021 Nov;476(11):3889-3897.
- [5]. Deng T, et al. Higenamine Improves Cardiac and Renal Fibrosis in Rats With Cardiorenal Syndrome via ASK1 Signaling Pathway. *J Cardiovasc Pharmacol*. 2020 Jun;75(6):535-544.
- [6]. Erasto, Paul et al. Evaluation of Antimycobacterial Activity of Higenamine Using *Galleria mellonella* as an In Vivo Infection Model. *Natural products and bioprospecting* vol. 8,1 (2018): 63-69.
- [7]. Dong, Hui et al. Higenamine Promotes Osteogenesis Via IQGAP1/SMAD4 Signaling Pathway and Prevents Age- and Estrogen-Dependent Bone Loss in Mice. *Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research* vol. 38,5 (2023): 775-791.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA