



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

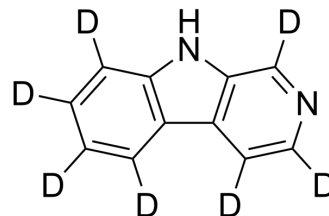
mail@szabo-scandic.com

www.szabo-scandic.com

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

Norharman-d₇

Cat. No.:	HY-W700241
CAS No.:	1216503-21-7
Molecular Formula:	C ₁₁ HD ₇ N ₂
Molecular Weight:	175.24
Target:	Isotope-Labeled Compounds; Monoamine Oxidase; Endogenous Metabolite
Pathway:	Others; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Norharman-d₇ is deuterium labeled Norharmane. Norharmane (Norharman), a β -carboline alkaloid, is a potent and reversible monoamine oxidase inhibitor, with IC₅₀ values of 6.5 and 4.7 μ M for MAO-A and MAO-B, respectively. Norharmane causes antidepressant responses. Norharmane is also a prospective anti-cancer photosensitizer. Norharmane alters polar auxin transport (PAT) by inhibiting PIN2, PIN3 and PIN7 transport proteins, thus causing a significant inhibitory effect on the growth of *Arabidopsis thaliana* seedlings^{[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]. Herraiz T, et al. Human monoamine oxidase enzyme inhibition by coffee and beta-carbolines norharman and harman isolated from coffee. *Life Sci*. 2006 Jan 18;78(8):795-802.
- [3]. López-González D, et al. A natural indole alkaloid, norharmane, affects PIN expression patterns and compromises root growth in *Arabidopsis thaliana*. *Plant Physiol Biochem*. 2020 Jun;151:378-390.
- [4]. Ebrahimi-Ghiri M, et al. Anxiolytic and antidepressant effects of ACPA and harmaline co-treatment. *Behav Brain Res*. 2019 May 17;364:296-302.
- [5]. Saito K, Chen CY, Masana M, Crowley JS, Markey SP, Heyes MP. 4-Chloro-3-hydroxyanthranilate, 6-chlorotryptophan and norharmane attenuate quinolinic acid formation by interferon-gamma-stimulated monocytes (THP-1 cells). *Biochem J*. 1993 Apr 1;291 (Pt 1)(Pt 1):11-4.
- [6]. Paul BK, et al. Binding of norharmane with RNA reveals two thermodynamically different binding modes with opposing heat capacity changes. *J Colloid Interface Sci*. 2019 Mar 7;538:587-596.
- [7]. Luo HZ, et al. Inhibitory effect of norharmane on *Serratia marcescens* NJ01 quorum sensing-mediated virulence factors and biofilm formation. *Biofouling*. 2021 Feb;37(2):145-160.

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