



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 Handels GmbH

Quellenstraße 110, A-1100 Wien

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

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

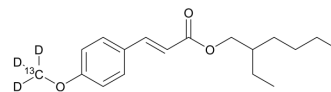
mail@szabo-scandic.com

www.szabo-scandic.com

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

Octinoxate-¹³C,₃D₃

Cat. No.:	HY-B1234S
Molecular Formula:	C ₁₇ ¹³ CH ₂₃ D ₃ O ₃
Molecular Weight:	294.41
Target:	Cytochrome P450; Thyroid Hormone Receptor; Androgen Receptor; Estrogen Receptor/ERR; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Octinoxate-13C,₃D₃ is the deuterium labeled Octinoxate (HY-W245806). Octinoxate (Octyl methoxycinnamate) is a thyroid hormone receptor agonist, reducing the levels of triiodothyronine (T3) and thyroxine (T4) and transcription levels of genes related to type II deiodinase (deio2) in Japanese Medaka. Octinoxate is commonly used as a safe ultraviolet (UV) filter used in the aquatic environment. Octinoxate inhibits CYP1A1 and CYP1B1 to regulate hyaluronan (HA) (HY-B0633A) metabolism in a PI3K pathway-dependent manner in human keratinocytes. Octinoxate also exhibits an anti-estrogenic and anti-androgenic effect in vitro and in vivo^{[1][2][3][4][5]}.

REFERENCES

- [1]. Cahova J, et al. Octinoxate as a potential thyroid hormone disruptor - A combination of in vivo and in vitro data. *Sci Total Environ.* 2023 Jan 15;856(Pt 1):159074.
- [2]. Schmutzler C, et al. Endocrine disruptors and the thyroid gland--a combined in vitro and in vivo analysis of potential new biomarkers. *Environ Health Perspect.* 2007 Dec;115 Suppl 1(Suppl 1):77-83.
- [3]. Ka Y, et al. Waterborne exposure to avobenzone and octinoxate induces thyroid endocrine disruption in wild-type and thraa-/- zebrafish larvae[J]. *Ecotoxicology.* 2022 Aug;31(6):948-955.
- [4]. Phelan-Dickinson SJ, et al. The UVR Filter Octinoxate Modulates Aryl Hydrocarbon Receptor Signaling in Keratinocytes via Inhibition of CYP1A1 and CYP1B1[J]. *Toxicol Sci.* 2020 Sep 1;177(1):188-201.
- [5]. Chang KY, et al. Organic ultraviolet filters regulate hyaluronan metabolism in human epidermal keratinocytes through the phosphatidylinositol 3-kinase pathway[J]. *Toxicol In Vitro.* 2023 Feb;86:105511.

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