



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) 

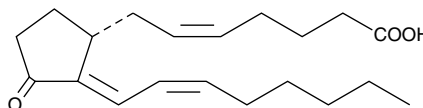
Product Information



CAY10410

Item No. 18590

CAS Registry No.:	596104-94-8
Formal Name:	11-oxo-prosta-5Z,12E,14Z-trien-1-oic acid
Synonym:	9,10-dihydro-15-deoxy- $\Delta^{12,14}$ -Prostaglandin J ₂
MF:	C ₂₀ H ₃₀ O ₃
FW:	318.5
Purity:	≥98% (isomer mixture)
Stability:	≥1 year at -20°C
Supplied as:	A solution in methyl acetate
UV/Vis.:	λ_{\max} : 293 nm



Laboratory Procedures

For long term storage, we suggest that CAY10410 be stored as supplied at -20°C. It should be stable for at least one year.

CAY10410 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of CAY10410 in these solvents is approximately 75, 20, and 100 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of CAY10410 is needed, it can be prepared by evaporating the methyl acetate and directly dissolving the neat oil in aqueous buffers. The solubility of CAY10410 in PBS (pH 7.2) is approximately 2.7 mg/ml. We do not recommend storing the aqueous solution for more than one day.

CAY10410 is an analog of prostaglandin D₂/prostaglandin J₂ (PGD₂/PGJ₂) with structural modifications intended to give it PPAR γ ligand activity and resistance to metabolism. 15-deoxy- $\Delta^{12,14}$ -PGJ₂ has been shown to be a potent ligand for PPAR γ .¹ Metabolism of the cyclopentenone prostaglandins PGA₂ PGJ₂, and Δ^{12} -PGJ₂ occurs *via* glutathione addition across the α,β unsaturated enone.² CAY10410 was designed as an analog of the PPAR γ -binding prostaglandins which could not undergo this conjugation reaction. In human neuroblastoma SH-SY5Y cells, CAY10410 was not cytotoxic at up to 25 μ M. It also failed to covalently modify thioredoxin or induce oxidative stress at 50 μ M.³

References

1. Forman, B.M., Tontonoz, P., Chen, J. *et al.* 15-deoxy- $\Delta^{12,14}$ -prostaglandin J₂ is a ligand for the adipocyte determination factor PPAR γ . *Cell* **83**, 803-812 (1995).
2. Atsmon, J., Sweetman, B.J., Baertschi, S.W. *et al.* Formation of thiol conjugates of 9-deoxy- Δ^9,Δ^{12} (E)-prostaglandin D₂ and Δ^{12} (E)-prostaglandin D₂. *Biochemistry* **29**, 3760-3765 (1990).
3. Shibata, T., Yamada, T., Ishii, T., *et al.* Thioredoxin as a molecular target of cyclopentenone prostaglandins. *J. Biol. Chem.* **278**(28), 26046-26054 (2003).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/18590

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants **only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog.**

Copyright Cayman Chemical Company, 06/20/2012

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com