



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



Aldoxorubicin (hydrochloride)

Item No. 35311

CAS Registry No.: 480998-12-7
Formal Name: 2,5-dihydro-2,5-dioxo-1H-pyrrole-1-hexanoic acid, 2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy- α -L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazide, monohydrochloride

Synonyms: DOXO-EMCH, INNO-206, MC-DOXHZN

MF: C₃₇H₄₂N₄O₁₃ • HCl

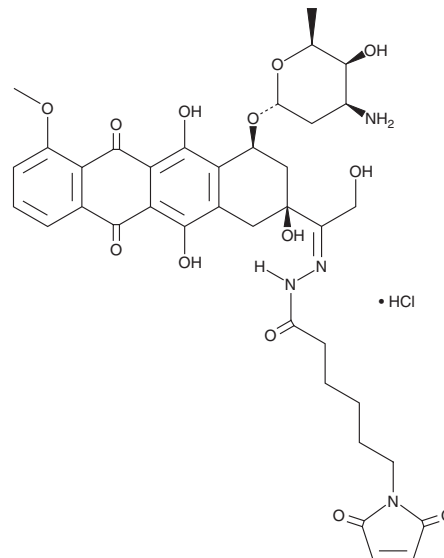
FW: 787.2

Purity: \geq 95%

Supplied as: A solid

Storage: -20°C

Stability: \geq 4 years



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

Laboratory Procedures

Aldoxorubicin (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the aldoxorubicin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Aldoxorubicin (hydrochloride) is soluble in ethanol and DMSO.

Description

Aldoxorubicin is a prodrug form of the anthracycline antitumor antibiotic doxorubicin (Item No. 15007).¹ Aldoxorubicin selectively binds to serum albumin, which releases doxorubicin in acidic environments, such as the tumor microenvironment. It inhibits the proliferation of RenCa renal cell carcinoma cells as well as MCF-7 breast and LXFL 529 lung cancer cells (IC₅₀'s = 1, 1.1, and 0.5 μ M, respectively). Aldoxorubicin (39.3 μ mol/kg) induces tumor regression in an MDA-MB-435 breast cancer mouse xenograft model. Unlike doxorubicin, aldoxorubicin is not toxic to mice (LD₅₀ = >60 mg/kg).² It has also been used to conjugate doxorubicin to antibodies.³

References

1. Kratz, F., Warnecke, A., Scheuermann, K., *et al.* Probing the cysteine-34 position of endogenous serum albumin with thiol-binding doxorubicin derivatives. Improved efficacy of an acid-sensitive doxorubicin derivative with specific albumin-binding properties compared to that of the parent compound. *J. Med. Chem.* **45**(25), 5523-5533 (2002).
2. Kratz, F., Ehling, G., Kauffmann, H.M., *et al.* Acute and repeat-dose toxicity studies of the (6-maleimidocaproyl)hydrazone derivative of doxorubicin (DOXO-EMCH), an albumin-binding prodrug of the anticancer agent doxorubicin. *Hum. Exp. Toxicol.* **26**(1), 19-35 (2007).
3. Willner, D., Trail, P.A., Hofstead, S.J., *et al.* (6-Maleimidocaproyl)hydrazone of doxorubicin—a new derivative for the preparation of immunoconjugates of doxorubicin. *Bioconjug. Chem.* **4**(6), 521-527 (1993).

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, 09/30/2022

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