



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

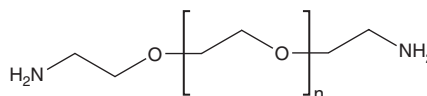
# PRODUCT INFORMATION



## PEG diamine

Item No. 21174

**CAS Registry No.:** 24991-53-5  
**Formal Name:**  $\alpha$ -(2-aminoethyl)- $\omega$ -(2-aminoethoxy)-poly(oxy-1,2-ethanediyl)  
**Synonyms:** PEG-*bis*-amine, Polyoxyethylene-*bis*-amine  
**MF:**  $(C_2H_4O)_n C_4H_{12}N_2O$   
**Purity:**  $\geq 95\%$   
**Supplied as:** A liquid  
**Storage:**  $-20^\circ\text{C}$   
**Stability:**  $\geq 2$  years



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

### Laboratory Procedures

PEG diamine is supplied as a liquid. A stock solution may be made by dissolving the PEG diamine in the solvent of choice, which should be purged with an inert gas. PEG diamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of PEG diamine in these solvents is approximately 33 mg/ml.

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. Organic solvent-free aqueous solutions of PEG diamine can be prepared by directly dissolving the liquid in aqueous buffers. The solubility of PEG diamine in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PEG diamine is a PEGylated building block.<sup>1,2</sup> It has been used as a linker to conjugate folic acid (Item No. 20515) to 1,2-distearoyl-*rac*-glycero-PE (1,2-DSPE) as a component in the formation of doxorubicin-containing liposomes with anticancer activity.<sup>1</sup> PEG diamine has also been conjugated to oleanolic acid (Item No. 11726), which improves oleanolic acid-induced inhibition of cell proliferation by 677-fold in HepG2 hepatocellular carcinoma cells.<sup>2</sup>

### References

1. Lee, R.J. and Low, P.S. Folate-mediated tumor cell targeting of liposome-entrapped doxorubicin in vitro. *Biochim. Biophys. Acta* **1233(2)**, 134-144 (1995).
2. Jannus, F., Medina-O'Donnell, M., Rivas, F., et al. A diamine-PEGylated oleanolic acid derivative induced efficient apoptosis through a death receptor and mitochondrial apoptotic pathway in HepG2 human hepatoma cells. *Biomolecules* **10(10)**, 1375 (2020).

#### 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, 12/16/2022

#### 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