



# 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



## MLN4924

Item No. 15217

CAS Registry No.: 905579-51-3

Formal Name: sulfamic acid, [(1S,2S,4R)-4-[4-[[[(1S)-2,3-dihydro-1H-inden-1-yl]amino]-7H-pyrrolo[2,3-d]pyrimidin-7-yl]-2-hydroxycyclopentyl]methyl ester

Synonym: Pevonedistat

MF:  $C_{21}H_{25}N_5O_4S$

FW: 443.5

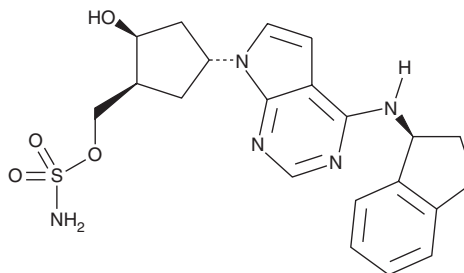
Purity:  $\geq 98\%$

UV/Vis.:  $\lambda_{max}$ : 213, 279 nm

Supplied as: A crystalline solid

Storage:  $-20^{\circ}C$

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

MLN4924 is supplied as a crystalline solid. A stock solution may be made by dissolving the MLN4924 in the solvent of choice. MLN4924 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of MLN4924 in ethanol is approximately 12.5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

MLN4924 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MLN4924 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. MLN4924 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

NEDD8 is an ubiquitin-like protein whose activity is required to activate cullin-RING ubiquitin E3 ligases (CRLs) responsible for the ubiquitination and proteasome-dependent turnover of certain substrates with roles relevant to cellular processes important for cancer cell survival. Neddylation of CRLs is initiated by NEDD8-activating enzyme (NAE), which has become a novel target in cancer therapeutic research.<sup>1</sup> MLN4924 is an analog of adenosine 5'-monophosphate that selectively inhibits NAE ( $IC_{50} = 4.7$  nM).<sup>2</sup> At much higher concentrations, MLN4924 inhibits the related enzymes ubiquitin-activating enzyme and SUMO-activating enzyme with  $IC_{50}$  values of 1.5 and 8.2  $\mu$ M, respectively.<sup>2</sup> At 0.3  $\mu$ M, MLN4924 has been shown to disrupt CRL-mediated protein turnover leading to apoptosis in HCT116 cells by deregulating S-phase DNA synthesis.<sup>2</sup> *In vivo*, 30-60 mg/kg MLN4924 dose-dependently suppresses the growth of human tumor xenografts in mice.<sup>2</sup>

### References

1. Soucy, T.A., Smith, P.G., and Rolfe, M. Targeting NEDD8-activated cullin-RING ligases for the treatment of cancer. *Clin. Cancer Res.* **15**(12), 3912-3916 (2009).
2. Soucy, T.A., Smith, P.G., Milhollen, M.A., *et al.* An inhibitor of NEDD8-activating enzyme as a new approach to treat cancer. *Nature* **458**(7239), 732-736 (2009).

#### 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, 08/18/2016

#### 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