



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

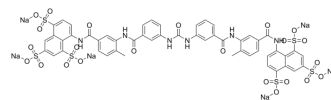
mail@szabo-scandic.com

www.szabo-scandic.com

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

Suramin sodium salt (Standard)

Cat. No.:	HY-B0879AR
CAS No.:	129-46-4
Molecular Formula:	C ₅₁ H ₃₄ N ₆ Na ₆ O ₂₃ S ₆
Molecular Weight:	1429.17
Target:	SARS-CoV; Phosphatase; Sirtuin; Reverse Transcriptase; Topoisomerase; Apoptosis; Parasite
Pathway:	Anti-infection; Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Epigenetics; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Suramin (sodium salt) (Standard) is the analytical standard of Suramin (sodium salt). This product is intended for research and analytical applications. Suramin sodium salt (Suramin hexasodium salt) is a reversible and competitive protein-tyrosine phosphatases (PTPases) inhibitor^[1]. Suramin sodium salt is a potent inhibitor of sirtuins: SirT1 (IC₅₀=297 nM), SirT2 (IC₅₀=1.15 μM), and SirT5 (IC₅₀=22 μM)^[2]. Suramin sodium salt is a competitive inhibitor of reverse transcriptase (DNA topoisomerase II: IC₅₀=5 μM)^{[3][4]}. Suramin sodium salt is a potent SARS-CoV-2 RNA-dependent RNA polymerase (RdRp) inhibitor^[5]. Suramin sodium salt efficiently inhibits IP5K and is an antiparasitic, anti-neoplastic and anti-angiogenic agent^{[6][7][8]}.

REFERENCES

- [1]. Jindal HK, et al. Suramin affects DNA synthesis in HeLa cells by inhibition of DNA polymerases. *Cancer Res.* 1990 Dec 15;50(24):7754-7.
- [2]. Izikki M, et al. The beneficial effect of suramin on monocrotaline-induced pulmonary hypertension in rats. *PLoS One.* 2013 Oct 15;8(10):e77073.
- [3]. Zhang YL, et al. Suramin is an active site-directed, reversible, and tight-binding inhibitor of protein-tyrosine phosphatases. *J Biol Chem.* 1998 May 15;273(20):12281-7.
- [4]. Trapp J, et al. Structure-activity studies on suramin analogues as inhibitors of NAD⁺-dependent histone deacetylases (sirtuins). *ChemMedChem.* 2007 Oct;2(10):1419-31.
- [5]. Schuetz A, et al. Structural basis of inhibition of the human NAD⁺-dependent deacetylase SIRT5 by suramin. *Structure.* 2007 Mar;15(3):377-89.
- [6]. De Clercq E, et al. Suramin: a potent inhibitor of the reverse transcriptase of RNA tumor viruses. *Cancer Lett.* 1979 Nov;8(1):9-22.
- [7]. Novaes RD, et al. Purinergic Antagonist Suramin Aggravates Myocarditis and Increases Mortality by Enhancing Parasitism, Inflammation, and Reactive Tissue Damage in Trypanosoma cruzi-Infected Mice. *Oxid Med Cell Longev.* 2018 Sep 30;2018:7385639.
- [8]. Wanchao Yin, et al. Structural basis for inhibition of the SARS-CoV-2 RNA polymerase by suramin. *Nat Struct Mol Biol.* 2021 Mar;28(3):319-325.
- [9]. Xiaozhe Zhang, et al. Suramin and NF449 Are IP5K Inhibitors That Disrupt IP6-mediated Regulation of Cullin RING Ligase and Sensitize Cancer Cells to MLN4924/pevonedistat. *J Biol Chem.* 2020 Jun 3; jbc.RA120.014375.

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