



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

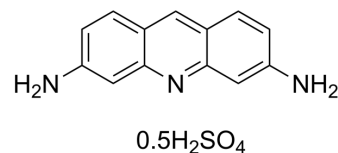
mail@szabo-scandic.com

www.szabo-scandic.com

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

Proflavine hemisulfate

Cat. No.:	HY-B0883
CAS No.:	1811-28-5
Molecular Formula:	C ₁₃ H ₁₁ N ₃ ·1/2H ₂ SO ₄
Molecular Weight:	258.28
Target:	Bacterial; Autophagy; Potassium Channel
Pathway:	Anti-infection; Autophagy; Membrane Transporter/Ion Channel
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 5 mg/mL (19.36 mM)
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.8718 mL	19.3588 mL	38.7177 mL
	5 mM	0.7744 mL	3.8718 mL	7.7435 mL
	10 mM	0.3872 mL	1.9359 mL	3.8718 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Proflavine hemisulfate, an acridine dye, is a known DNA intercalating agent. Anti-microbial agent^[1]. Proflavine hemisulfate behaves as a pore blocker for K_{ir}3.2. Proflavine hemisulfate is a potential lead compound for K_{ir}3.2-associated neurological diseases^[2].

In Vitro

Proflavine (0.1-10 μM; 24 hours) inhibits the growth of K_{ir}3.2-transformant cells and K_{ir}3.2 activity in a concentration-dependent manner^[1].
Proflavine (300 μM) progressively reduces the current amplitude of K_{ir}3.2 mutant to 27.7±4.3% of the control^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Cell Viability Assay^[2]

Cell Line:	K _{ir} 3.2 [*] -transformant BYT123 cells
Concentration:	0.1, 1, and 10 μM
Incubation Time:	24 hours

	<table border="1"> <tr> <td>Result:</td> <td>Dose-dependent inhibition of the growth of $K_{ir}3.2^*$-transformant cells. Attenuated the growth of $K_{ir}3.2^*$-transformant cells without affecting the growth of control cells.</td> </tr> </table>	Result:	Dose-dependent inhibition of the growth of $K_{ir}3.2^*$ -transformant cells. Attenuated the growth of $K_{ir}3.2^*$ -transformant cells without affecting the growth of control cells.						
Result:	Dose-dependent inhibition of the growth of $K_{ir}3.2^*$ -transformant cells. Attenuated the growth of $K_{ir}3.2^*$ -transformant cells without affecting the growth of control cells.								
In Vivo	<p>The concentrations of Proflavine (20 mg/kg) in whole blood after intravenous injection decreased rapidly at the beginning and remained stable from around 30 min after dosing^[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Adult male Sprague Dawley rats (weighing approximately 200 g)^[3]</td> </tr> <tr> <td>Dosage:</td> <td>20 mg/kg (Pharmacokinetic Analysis)</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection; 2, 4, 5, 10, 15, 20, 25, and 30 min after dosing</td> </tr> <tr> <td>Result:</td> <td>Concentration decreased rapidly from whole blood in the first 5 min after dosing, followed by a slower decrease.</td> </tr> </table>	Animal Model:	Adult male Sprague Dawley rats (weighing approximately 200 g) ^[3]	Dosage:	20 mg/kg (Pharmacokinetic Analysis)	Administration:	Intravenous injection; 2, 4, 5, 10, 15, 20, 25, and 30 min after dosing	Result:	Concentration decreased rapidly from whole blood in the first 5 min after dosing, followed by a slower decrease.
Animal Model:	Adult male Sprague Dawley rats (weighing approximately 200 g) ^[3]								
Dosage:	20 mg/kg (Pharmacokinetic Analysis)								
Administration:	Intravenous injection; 2, 4, 5, 10, 15, 20, 25, and 30 min after dosing								
Result:	Concentration decreased rapidly from whole blood in the first 5 min after dosing, followed by a slower decrease.								

CUSTOMER VALIDATION

- EMBO Rep. 2022 Apr 11;e53932.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Hitoshi Kawada, et al. Isolation of proflavine as a blocker of G protein-gated inward rectifier potassium channels by a cell growth-based screening system. *Neuropharmacology*. 2016 Oct;109:18-28.
- [2]. Mansour K.Gatasheh, et al. Proflavine an acridine DNA intercalating agent and strong antimicrobial possessing potential properties of carcinogen. *Karbala International Journal of Modern Science*. 2017 Dec, 3(4): 272-278.
- [3]. Jiaxin Chen, et al. Determination of proflavine in rat whole blood without sample pretreatment by laser desorption postionization mass spectrometry. *Anal Bioanal Chem*. 2017 Apr;409(11):2813-2819.

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