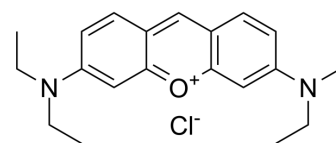


## Pyronin B

<b>Cat. No.:</b>	HY-D1543
<b>CAS No.:</b>	2150-48-3
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>27</sub> ClN <sub>2</sub> O
<b>Molecular Weight:</b>	358.9
<b>Target:</b>	DNA Stain
<b>Pathway:</b>	Cell Cycle/DNA Damage
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20.83 mg/mL (58.04 mM); ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.7863 mL	13.9315 mL	27.8629 mL
5 mM	0.5573 mL	2.7863 mL	5.5726 mL
10 mM	0.2786 mL	1.3931 mL	2.7863 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Pyronin B is an organic cationic dye used for the staining of bacteria, mycobacteria and ribonucleic acids. Pyronin B is also used as a small hydrophobic (SH) protein channel inhibitor<sup>[1][2]</sup>.

#### In Vitro

Pyronin B (0-15 μM) inhibits channel activity of approximately 60% of small hydrophobic (SH) proteins at a concentration of 10 μM, and the K<sub>d</sub> value of 6.8 μM<sup>[1]</sup>.

Pyronin B (0-0.25 μM) affects RSV replication in Vero cells in a dose-dependent manner, and its TCID<sub>50</sub> (50% tissue culture infection dose) = 0 at the concentration of 0.25 μM<sup>[1]</sup>.

Pyronin B (10 μM) can react with bromate in an oxidation reaction and the reaction rate increases dramatically with the addition of trace amounts of Ti (IV) with the characteristic absorption spectra of 555 nm<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Yan Li, et al. Inhibition of the human respiratory syncytial virus small hydrophobic protein and structural variations in a bicelle environment. J Virol. 2014 Oct;88(20):11899-914.

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA