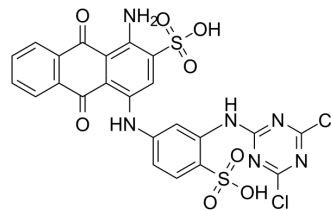


## Reactive Blue 4

<b>Cat. No.:</b>	HY-125815		
<b>CAS No.:</b>	13324-20-4		
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>6</sub> O <sub>8</sub> S <sub>2</sub>		
<b>Molecular Weight:</b>	637.43		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 83.33 mg/mL (130.73 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.5688 mL	7.8440 mL	15.6880 mL
5 mM	0.3138 mL	1.5688 mL	3.1376 mL
10 mM	0.1569 mL	0.7844 mL	1.5688 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 4.17 mg/mL (6.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 4.17 mg/mL (6.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 4.17 mg/mL (6.54 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (3.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (3.26 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Reactive Blue 4 is an anthraquinone dye, as a single colorimetric chemosensor for sequential determination of multiple analytes with different optical responses in aqueous media. Reactive Blue 4 is phytotoxic, cytotoxic and genotoxic. Reactive Blue 4 <sup>[1][2]</sup>.

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## REFERENCES

- [1]. Reactive Blue 4 as a Single Colorimetric Chemosensor for Sequential Determination of Multiple Analytes with Different Optical Responses in Aqueous Media: Cu<sup>2+</sup>-Cysteine Using a Metal Ion Displacement and Cu<sup>2+</sup>-Arginine Through the Host-Guest Interaction.
- [2]. Chaudhari AU, et al. Effective biotransformation and detoxification of anthraquinone dye reactive blue 4 by using aerobic bacterial granules. Water Res. 2017 Oct 1;122:603-613.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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