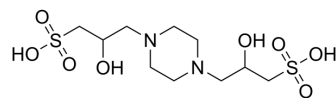


## POPSO

<b>Cat. No.:</b>	HY-D0876		
<b>CAS No.:</b>	68189-43-5		
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>22</sub> N <sub>2</sub> O <sub>8</sub> S <sub>2</sub>		
<b>Molecular Weight:</b>	362.42		
<b>Target:</b>	Biochemical Assay Reagents		
<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

1M NaOH : 100 mg/mL (275.92 mM; ultrasonic and adjust pH to 11 with 1M NaOH)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7592 mL	13.7961 mL	27.5923 mL
	5 mM	0.5518 mL	2.7592 mL	5.5185 mL
	10 mM	0.2759 mL	1.3796 mL	2.7592 mL

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

## BIOLOGICAL ACTIVITY

### Description

POPSO is a zwitterionic buffer, increases osmolality and shows marked inhibition of anion uniport. POPSO inhibits chloride uniport with an IC<sub>50</sub> value of 24 mM. POPSO enhances copper uptake and toxicity in alga, impairs mitochondrial inner membrane. The working pH range of POPSO sesquisodium salt is 7.2-8.5<sup>[1][2][3]</sup>.

## REFERENCES

- [1]. Ng LT, et al. Effect of buffers and osmolality on anion uniport across the mitochondrial inner membrane. *Biochim Biophys Acta*. 1993 Jun 10;1143(1):29-37.
- [2]. Vasconcelos, et al. Influence of zwitterionic pH buffers on the bioavailability and toxicity of copper to the alga *Amphidinium carterae*. 2009 Nov;19(10):2542-2550.
- [3]. Kebede N, et al. Electrogenerated chemiluminescence of tris(2,2' bipyridine)ruthenium(II) using common biological buffers as co-reactant, pH buffer and supporting electrolyte. *Analyst*. 2015 Nov 7;140(21):7142-5.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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