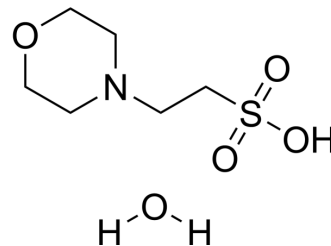


MES monohydrate

Cat. No.:	HY-D0858A
CAS No.:	145224-94-8
Molecular Formula:	C ₆ H ₁₅ NO ₅ S
Molecular Weight:	213.25
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 14.29 mg/mL (67.01 mM); ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.6893 mL	23.4467 mL	46.8933 mL
		5 mM	0.9379 mL	4.6893 mL	9.3787 mL
		10 mM	0.4689 mL	2.3447 mL	4.6893 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1.43 mg/mL (6.71 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.43 mg/mL (6.71 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	MES (2-Morpholinoethanesulphonic acid) monohydrate is a buffering agent in biology and biochemistry. MES monohydrate is one of the Good's buffers, the buffer capacity ranging pH 5.5-7.0. MES monohydrate is broadly used to regulate pH value for plants culture medium, reagent solution, and physiological experiments ^{[1][2]} .
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REFERENCES

- [1]. N E Good, et al. Hydrogen ion buffers for biological research. *Biochemistry*. 1966 Feb;5(2):467-77.
- [2]. Tomoko Kagenishi, et al. MES Buffer Affects Arabidopsis Root Apex Zonation and Root Growth by Suppressing Superoxide Generation in Root Apex. *Front Plant Sci*. 2016 Feb 18;7:79.

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

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