# MCE RedChemExpress

## **Product** Data Sheet

#### **MES**

Cat. No.: HY-D0858

CAS No.: 4432-31-9Molecular Formula:  $C_6H_{13}NO_4S$ Molecular Weight: 195.24

Target: Biochemical Assay Reagents

Pathway: Others

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro H<sub>2</sub>O: 125 mg/mL (640.24 mM; Need ultrasonic)

DMSO: 50 mg/mL (256.10 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.1219 mL	25.6095 mL	51.2190 mL
	5 mM	1.0244 mL	5.1219 mL	10.2438 mL
	10 mM	0.5122 mL	2.5610 mL	5.1219 mL

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

In Vivo 1. Add each solvent one by one: PBS

Solubility: 50 mg/mL (256.10 mM); Clear solution; Need ultrasonic

#### **BIOLOGICAL ACTIVITY**

Description

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

### **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.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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