**Proteins** 

# **Product** Data Sheet

# **TAPS**

Cat. No.: HY-D0877 CAS No.: 29915-38-6 Molecular Formula:  $C_7H_{17}NO_6S$ Molecular Weight: 243.28

Target: **Biochemical Assay Reagents** 

Pathway: Others

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

> -20°C 1 month

#### **SOLVENT & SOLUBILITY**

H<sub>2</sub>O: 125 mg/mL (513.81 mM; Need ultrasonic) In Vitro

DMSO: 100 mg/mL (411.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.1105 mL	20.5525 mL	41.1049 mL
	5 mM	0.8221 mL	4.1105 mL	8.2210 mL
	10 mM	0.4110 mL	2.0552 mL	4.1105 mL

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

### **BIOLOGICAL ACTIVITY**

Description

TAPS is a biological buffer, remain lysozyme native structure intact and prevents thermal denaturation against high temperatures. TAPS exhibits pK<sub>a</sub> value of 8.1, while the half-maximum values of connexin channel activity is 8.5 (pH)<sup>[1][2]</sup>.

## **REFERENCES**

[1]. Pannuru P, et al. The effects of biological buffers TRIS, TAPS, TES on the stability of lysozyme. Int J Biol Macromol. 2018 Jun;112:720-727.

[2]. Bevans CG, et al. Regulation of connexin channels by pH. Direct action of the protonated form of taurine and other aminosulfonates. J Biol Chem. 1999 Feb 5;274(6):3711-9.Bevans CG, et al. Regulation of connexin channels by pH. Direct action of the protonated form of taurine and other aminosulfonates. J Biol Chem. 1999 Feb 5;274(6):3711-9.

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

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