# D-(+)-Trehalose dihydrate

**Cat. No.:** HY-N1132A

**CAS No.:** 6138-23-4

**Molecular Formula:** $C_{12}H_{26}O_{13}$

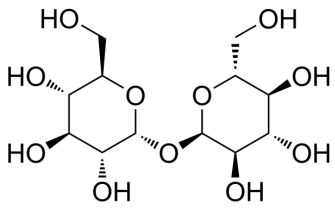
**Molecular Weight:** 378.33

**Target:** Endogenous Metabolite

**Pathway:** Metabolic Enzyme/Protease

**Storage:** 4°C, stored under nitrogen

* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)




2 $H_2O$

## SOLVENT & SOLUBILITY

**In Vitro**

$H_2O$ : 150 mg/mL (396.48 mM; Need ultrasonic)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.6432 mL | 13.2160 mL | 26.4320 mL |
| 5 mM | 0.5286 mL | 2.6432 mL | 5.2864 mL |
| 10 mM | 0.2643 mL | 1.3216 mL | 2.6432 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 (132.16 mM); Clear solution; Need ultrasonic

## BIOLOGICAL ACTIVITY

**Description**

D-(+)-Trehalose dihydrate, isolated from Saccharomyces cerevisiae, can be used as a food ingredient and pharmaceutical excipient.

**$IC_{50}$ & Target**

Microbial Metabolite | Human Endogenous Metabolite

**In Vitro**

Trehalose dihydrate is a safe, naturally occurring disaccharide used as a food ingredient and pharmaceutical excipient[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Microchemical Journal. 2024 Jun, 201, 110666.

- Ren Fail. 2024 Dec;46(1):2338933.
- J Ocul Pharmacol Ther. 2022 Jun;38(5):331-338.

See more customer validations on www.MedChemExpress.com

## REFERENCES

[1]. Megarry AJ, et al. Amorphous trehalose dihydrate by cryogenic milling. Carbohydr Res. 2011 Jun 1;346(8):1061-4.



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