

Trehalose 6-phosphate potassium salt hydrate

Chemical Properties

CAS No. :

Formula: C₁₂H₂₁K₂O₁₄P xH₂O

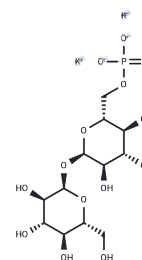
Molecular Weight:

Store at low temperature

Storage:

Store at -20°C

Actual storage temperature shall be subject to the COA.



Biological Description

| | |
|---------------|---|
| Description | Trehalose 6-phosphate potassium salt hydrate (α,α -Trehalose 6-phosphate potassium salt hydrate) is a Trehalose derivative, an intermediate in trehalose biosynthesis, and an important signaling metabolite in plants. It can regulate root branching through the master kinase SNF1-related kinase-1 (SnRK1) and rapamycin target (TOR). |
| Targets(IC50) | Endogenous Metabolite |

Solubility Information

| | |
|------------|---|
| Solubility | H ₂ O: 40 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Reference

Walmagh M, et al. Trehalose Analogues: Latest Insights in Properties and Biocatalytic Production. *Int J Mol Sci.* 2015 Jun 15;16(6):13729-45.

Goddijn OJ, et al. Inhibition of trehalase activity enhances trehalose accumulation in transgenic plants. *Plant Physiol.* 1997 Jan;113(1):181-90.

Lunn JE, et al. Trehalose metabolism in plants. *Plant J.* 2014 Aug;79(4):544-67.

Henry C, et al. The trehalose pathway in maize: conservation and gene regulation in response to the diurnal cycle and extended darkness. *J Exp Bot.* 2014 Nov;65(20):5959-73.

Padilla L, et al. Overproduction of trehalose: heterologous expression of *Escherichia coli* trehalose-6-phosphate synthase and trehalose-6-phosphate phosphatase in *Corynebacterium glutamicum*. *Appl Environ Microbiol.* 2004 Jan;70(1):370-6.

Wahl V, et al. Regulation of flowering by trehalose-6-phosphate signaling in *Arabidopsis thaliana*. *Science.* 2013 Feb 8;339(6120):704-7.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286

E_mail: info@targetmol.com

Address: 34 Washington Street, Wellesley Hills, MA 02481