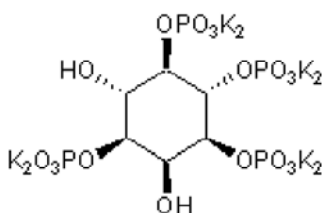


Product Name: D-*myo*-Inositol-1,3,4,5-tetrakisphosphate, octapotassium salt **Catalog No.:** 1420 **Batch No.:** 3
CAS Number: 145843-69-2

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆H₈O₁₈P₄.K₈
Batch Molecular Weight: 804.73
Physical Appearance: White lyophilised solid
Solubility: Soluble in water
Storage: Desiccate at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows >98% purity
¹H NMR: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: D-*myo*-Inositol-1,3,4,5-tetrakisphosphate, octapotassium salt **Catalog No.:** 1420 **Batch No.:** 3

CAS Number: 145843-69-2

Description:

Phosphorylation product of inositol 1,4,5-trisphosphate (Ins (1,4,5)P₃). Potent inhibitor of Ins (1,4,5)P₃ 5-phosphatase (IC₅₀ ~150 nM); facilitates Ca²⁺ influx by sensitizing Ins (1,4,5)P₃-mediated activation of I_{CRAC}. At higher concentrations, acts as an inhibitor of Ins (1,4,5)P₃ receptors.

Physical and Chemical Properties:

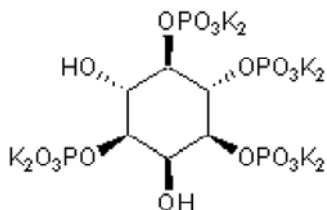
Batch Molecular Formula: C₆H₈O₁₈P₄.K₈

Batch Molecular Weight: 804.73

Physical Appearance: White lyophilised solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble in water

This product is supplied in a sealed glass ampoule as a lyophilized solid, please refer to the Tocris catalogue for opening instructions. Lyophilized solids can be hard to visualize therefore solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Hermosura et al (2000) InsP₄ facilitates store-operated calcium influx by inhibition of InsP₃ 5-phosphatase. *Nature* **408** 735. PMID: 11130077.

Cullen et al (1998) Bridging the GAP in inositol 1,3,4,5-tetrakisphosphate signalling. *Biochim.Biophys.Acta* **1436** 35. PMID: 9838034.

Balla et al (1991) Agonist-induced calcium signaling is impaired in fibroblasts overproducing inositol 1,3,4,5-tetrakisphosphate. *J.Biol.Chem.* **266** 24719. PMID: 1662215.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956