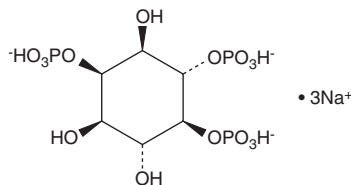


PRODUCT INFORMATION

D-myo-Inositol-2,5,6-triphosphate (sodium salt)

Item No. 10008424

Formal Name:	D-myo-inositol-2,5,6-tris(dihydrogen phosphate), trisodium salt
Synonyms:	Ins(2,5,6)P ₃ (sodium salt), 2,5,6-IP ₃ (sodium salt)
MF:	C ₆ H ₁₂ O ₁₅ P ₃ • 3Na
FW:	486.0
Purity:	≥98%
Supplied as:	A lyophilized powder
Storage:	-20°C
Stability:	≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

D-myo-Inositol-2,5,6-triphosphate (Ins(2,5,6)P₃) (sodium salt) is supplied as a lyophilized powder. Ins(2,5,6)P₃ (sodium salt) is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of Ins(2,5,6)P₃ (sodium salt) be prepared by directly dissolving the lyophilized powder in aqueous buffers. The solubility of Ins(2,5,6)P₃ (sodium salt) in PBS, pH 7.2, is approximately 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ins(2,5,6)P₃ (sodium salt) is a member of the inositol phosphate (InsP) family of second messengers that play a critical role in the transmission of cellular signals.^{1,2} The most studied InsP, Ins(1,4,5)P₃ is a second messenger produced in cells by phospholipase C (PLC)-mediated hydrolysis of phosphatidylinositol-4,5-bisphosphate.^{3,4} Binding of the Ins(1,4,5)P₃ to its receptor on the endoplasmic reticulum results in opening of calcium channels and an increase in intracellular calcium.^{4,5} Ins(2,5,6)P₃ is a less potent inducer of calcium release from permeabilized rat basophilic leukemia cells with an EC₅₀ value of 110 μM compared to Ins(1,4,5)P₃, which has an EC₅₀ value of 0.17 μM.⁶

References

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WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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