WARNING
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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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PRODUCT INFORMATION

D-myo-Inositol-1,4,5,6-tetraphosphate (sodium salt)
Item No. 10007783

CAS Registry No.: 157542-47-7

Formal Name: D-myo-inositol-1,4,5,6-tetra(hydrogen phosphate), tetrasodium salt

Synonyms: Ins(1,4,5,6)-P₄, 1,4,5,6-IP₄

MF: C₆H₁₂O₁₈P₄ • 4Na

FW: 588.0

Purity: ≥98%

Supplied as: A lyophilized powder

Storage: -20°C

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

D-myo-Inositol-1,4,5,6-tetraphosphate (sodium salt) (Ins(1,4,5,6)-P₄) is supplied as a lyophilized powder. Ins(1,4,5,6)-P₄ is practically insoluble in organic solvents. For biological experiments, we suggest that aqueous solutions of Ins(1,4,5,6)-P₄ be prepared by directly dissolving the lyophilized powder in water. The solubility of Ins(1,4,5,6)-P₄ in water is at least 50 mg/ml.

Description

Ins(1,4,5,6)-P₄ is one of several different inositol oligophosphate isomers implicated in signal transduction. Production of Ins(1,4,5,6)-P₄ by intestinal epithelial cells increases approximately 2-14 fold, depending on the strain and incubation time, following infection with Salmonella.¹ Ins(1,4,5,6)-P₄ antagonizes epidermal growth factor (EGF) signalling through the phosphatidylinositol 3-kinase pathway.¹ Ins(1,4,5,6)-P₄ (tested as the D/L racemic mixture) is ~1,000-fold less potent than Ins(1,4,5)-P₃ at initiating Ca²⁺ release when injected into Xenopus oocytes.²

References
