

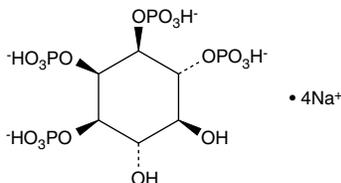
# Product Information



## D-*myo*-Inositol-1,2,3,6-tetraphosphate (sodium salt)

Item No. 10008450

**Formal Name:** D-*myo*-inositol-1,2,3,6-tetrakis (dihydrogen phosphate), tetrasodium salt  
**Synonyms:** Ins(1,2,3,6)-P<sub>4</sub> (sodium salt); 1,2,3,6-IP<sub>4</sub> (sodium salt)  
**MF:** C<sub>6</sub>H<sub>12</sub>O<sub>18</sub>P<sub>4</sub> • 4Na  
**FW:** 588.0  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A lyophilized powder



### Laboratory Procedures

For long term storage, we suggest that D-*myo*-inositol-1,2,3,6-tetraphosphate (Ins(1,2,3,6)-P<sub>4</sub>) (sodium salt) be stored as supplied at -20°C. It will be stable for at least one year.

Ins(1,2,3,6)-P<sub>4</sub> (sodium salt) is supplied as a lyophilized powder. Ins(1,2,3,6)-P<sub>4</sub> (sodium salt) is sparingly soluble in organic solvents. For biological experiments, we suggest that aqueous solutions of Ins(1,2,3,6)-P<sub>4</sub> (sodium salt) be prepared by directly dissolving the lyophilized powder in water. The solubility of Ins(1,2,3,6)-P<sub>4</sub> (sodium salt) in water is approximately 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Ins(1,2,3,6)-P<sub>4</sub> is one of the many inositol phosphate (InsP) isomers that act as small, soluble second messengers in the transmission of cellular signals.<sup>1-3</sup> The most studied InsP, Ins(1,4,5)-P<sub>3</sub> is a second messenger produced in cells by phospholipase C (PLC)-mediated hydrolysis of phosphatidylinositol-4,5-bisphosphate.<sup>4,5</sup> Binding of Ins(1,4,5)-P<sub>3</sub> to its receptor on the endoplasmic reticulum results in opening of the calcium channels and an increase in intracellular calcium.<sup>5,6</sup> Ins(1,2,3,6)-P<sub>3</sub> (tested as the meso compound) is 100-fold less potent than Ins(1,4,5)-P<sub>3</sub> at initiating Ca<sup>2+</sup> release when injected into *Xenopus* oocytes.<sup>7</sup>

### References

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