

Inorganic Pyrophosphatase (Yeast)

Catalog Number	LDG0007RI
Package	10 U / Customized package

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Overview

Description

Inorganic pyrophosphate (PPi) is generated as a reaction byproduct in many biosynthetic reactions which utilize ATP, including in vitro transcription and DNA polymerization. Inorganic pyrophosphatase (PPase) catalyzes the hydrolysis of inorganic pyrophosphate to orthophosphate ($\text{P}_2\text{O}_7^{4-} + \text{H}_2\text{O} + \text{PPase} \rightarrow 2\text{HPO}_4^{2-}$). PPase requires divalent metal cation (Mg^{2+}) for its enzymatic activity.

Product Note

Inorganic Pyrophosphatase (Yeast) requires divalent metal cation (Mg^{2+}) for its enzymatic activity. This enzyme is widely used in RNA IVT reaction.

Specifications

Expression system

Escherichia coli

Application

In vitro transcription, RNA amplification, miRNA and siRNA synthesis

Concentration

0.1 U/ μL

Buffer

Inorganic pyrophosphatase is supplied in 20 mM Tris-HCl (pH 8.0), 100 mM KCl, 0.1 mM EDTA, 1 mM DTT and 50% glycerol.

Purity

>98% as determined by SDS-PAGE analysis.

Unit Definition

One unit is defined as the amount of the enzyme hydrolysis 1 μmol of inorganic pyrophosphate in 1 minutes at 25°C.

Form

Liquid

Instruction**Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.




Stability & Storage

This product is stable after storage at:

- -20°C or -80°C for 12 months under sterile conditions from date of receipt.

Avoid repeated freeze/thaw cycles.

Disclaimer : For Research Use or Further Manufacturing Only.

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