

## Inorganic Pyrophosphatase (Yeast)

**Catalog Number** LDG0007RI

**Package** 10 U / Customized package

For full product information, images and publications, please visit [our website](#).



### 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 ( $P_2O_7^{4-} + H_2O + PPase \rightarrow 2HPO_4^{2-}$ ). 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

#### Concentration

0.1 U/ $\mu$ L

#### Purity

>98% as determined by SDS-PAGE analysis.

#### Application

In vitro transcription, RNA amplification, miRNA and siRNA synthesis

#### 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.

#### Unit Definition

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

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**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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