Pyrophosphatase, Inorganic

Product Information

Product Character: Supernatant liquid without impurities

Concentration: 0.1U/μl

Source: An *E.coli* strain with a cloned pyrophosphatase gene of yeast.

Storage Buffer: 20mM Tris-HCl, pH 8.0, 100mM KCl, 1mM DTT, 0.1mM EDTA, 50% Glycerol

Storage Condition: -20°C

Application: In vitro transcription(IVT)

Product Components

Component	Code/Size	
	PYR-EE201-A(10U)	PYR-EE201-B(50U)
Pyrophosphatase, Inorganic (0.1U/μl)	100μl	500μl

Product Introduction

Pyrophosphatase, Inorganic catalyzes the hydrolysis of inorganic pyrophosphate to form two orthophosphates. The enzyme requires Mg^{2+} for the highest activity and has a very high affinity for its substrate and the pH optimum is 7.

Protocol

1. Add the following components at room temperature:

Components	Volume
RNase-free Water	To 20μl
5×Transcription Buffer	4μl
T7 RNA Polymerase	2μl
CTP/GTP/ATP/UTP(100 mM)	2μl each
Murine RNase Inhibitor	1μl
DTT(optional)	X
Pyrophosphatase, Inorganic(optional)	0.2-0.4μl
DNA Template	0.2-1μg

2. Incubate at 37°C for 1-2h.

3. After transcription, add 2U of DNaseI to digest DNA template for 15min at 37°C.

Cautions

1. The product is active in a variety of reaction buffers.
2. The product is active at 16-37°C，and the optimum temperature is 25°C.