

# Inorganic Pyrophosphatase

## 产品基本信息 (Basic Product Information)

产品名称 Product Name	Inorganic Pyrophosphatase
来源 Source	重组E.coli Recombinant E.coli
活性定义 Unit Definition	在标准反应条件下,每分钟催化水解PPi,产生1 μmol Pi所需要的酶量为1个活性单位 One unit is defined as the amount of enzyme required to catalyze the hydrolysis of inorganic pyrophosphate to produce 1 μmol orthophosphate per minute under standard reaction conditions
存储缓冲液 Optimal Temperature	20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.1 mM EDTA, 1.0 mM DTT, 50% Glycerol
最适温度 Optimum temperature	25 °C, 在16 ~ 37 °C有活性 The optimal reaction temperature of the enzyme is 25 °C, and it is active at 16 ~ 37 °C

## 产品描述 (Product Description)

本产品为大肠杆菌重组表达的Inorganic Pyrophosphatase(酵母来源),可催化无机焦磷酸盐水解为正磷酸盐。在转录过程中,随着反应中生成的无机焦磷酸盐增多,会抑制转录产物生成,而无机焦磷酸酶能水解反应过程中生成的焦磷酸盐,避免了反应被抑制,又增加了产物的产量。

This product is an inorganic pyrophosphatase (yeast derived) expressed by Escherichia coli, which catalyzes the hydrolysis of inorganic pyrophosphate to orthophosphate. During transcription, the accumulation of inorganic pyrophosphate can inhibit the generation of transcriptional products, while inorganic pyrophosphatase can hydrolyze pyrophosphate generated in the process of reaction, avoiding the inhibition of reaction and increasing the yield of products.

## 产品组成 (Product Components)

产品名称 (Product Name)	货号 (Cat.No.)	规格 (Volume)
Inorganic Pyrophosphatase	EM4005	2 KU
		10 KU
		50 KU

## 质量要求 (Quality Requirement)

项目 (Item)	标准 (Standard)	方法 (Method)
外观 Appearance	澄清透明 Clear and transparent	目视检查 Visual inspection
活性 Activity	0.1 U/μL	转录产量法 Transcriptional yield method
纯度 Purity	≥ 95%	中国药典2020版第四部SDS-PAGE法(通则0541) Chinese Pharmacopoeia 2020 Edition Part 4 SDS-PAGE Method (General Rule 0541)
核酸内切酶残留 Endonuclease residue	无检出	0.4 U酶与DNA在37 °C孵育4 h Incubate 0.4 U enzyme with DNA at 37 °C for 4 hours
核酸外切酶残留 Exonuclease residue	无检出	0.4 U酶与DNA在37 °C孵育4 h Incubate 0.4 U enzyme with DNA at 37 °C for 4 hours
RNA酶残留 RNase residue	无检出	0.4 U酶与DNA在37 °C孵育4 h Incubate 0.4 U enzyme with DNA at 37 °C for 4 hours
细菌内毒素含量 Bacterial endotoxin content	< 2 EU/mL	中国药典2020版第四部凝胶限度试验法(通则1143) Chinese Pharmacopoeia 2020 Edition Part 4, gel Limit Test Method (General Rule 1143)
宿主蛋白残留 Host protein residue	< 50 ppm	中国药典2020版第四部菌体蛋白残留量测定法(通则3412) Chinese Pharmacopoeia 2020 Edition Part 4: Determination of Bacterial Protein Residues (General Rule 3412)

## 运输与保存 (Transport and Storage)

-20 °C条件保存,干冰运输。

Store at -20 °C and transport on dry ice.

## 注意事项 (Note)

- 1、本酶在多种反应液中均具有活性,通常在所需反应中可直接加入。
- 2、在65 °C 10 min可使本酶失活。

1. This enzyme is active in various reaction solutions and can usually be directly added in the desired reaction.
2. The enzyme can be inactivated at 65 °C for 10 minutes.