

RNase inhibitor, Murine (40 U/ μ L)

产品基本信息 (Basic Product Information)

产品名称 Product Name	RNase inhibitor, Murine
来源 Source	重组E.coli Recombinant E.coli
活性 Activity	40 U/ μ L
活性定义 Unit Definition	抑制5 ng RNase A活性的50%所需要的酶量定义为1个活性单位。RNase A的活性通过抑制Cyclic 2', 3'-CMP水解生成3'-CMP定量测定 One unit is defined as the amount of inhibitor required to inhibit 50% of the activity of 5 ng RNase A. The activity of RNase A was determined quantitatively by inhibiting the hydrolysis of Cyclic 2',3'-CMP to 3'-CMP.
最佳反应温度 Optimal Temperature	25 - 55 $^{\circ}$ C
最适pH Optimal pH	This product is active at pH 5.0 ~ 9.0, with the highest activity at pH 7.0 ~ 8.0.

产品描述 (Product Description)

本产品是在大肠杆菌中表达纯化的重组鼠源RNase抑制剂,可以与RNase A、RNase B或RNase C通过非竞争方式1:1结合,从而抑制这三种酶的活性,保护RNA不被降解。该抑制剂与各种商业化Reverse Transcriptase和DNA Polymerase兼容。鼠源RNase inhibitor由于不含人源蛋白中的两个对氧化非常敏感的半胱氨酸,因而具有更高的抗氧化活性,更加适合于对高DTT敏感的实验(如qPCR)。

This product is a purified recombinant murine RNase inhibitor expressed in Escherichia coli. It can be combined with RNase A, RNase B or RNase C in a non-competitive manner, in a 1:1 ratio, thereby inhibiting the activity of these three enzymes and protecting RNA from degradation. This inhibitor is compatible with various commercialized Reverse Transcriptases and DNA Polymerases. Murine RNase inhibitor has higher antioxidant activity due to the absence of two cysteines that are sensitive to oxidation in human proteins, making it more suitable for experiments sensitive to high DTT (such as qPCR).

适用范围 (Applications)

适用于需要去除RNase、对高还原剂敏感的实验,如qPCR等。

Suitable for experiments that require RNase removal and sensitivity to high reducing agents, such as qPCR. In vitro transcription.

产品组成 (Product Components)

产品名称 (Product Name)	货号 (Cat.No.)	规格 (Volume)
RNase inhibitor, Murine (40 U/ μ L)	EM4002-1	2 KU
	EM4002-2	10 KU
	EM4002-3	50 KU

运输与保存 (Transport and Storage)

-30 $^{\circ}$ C--15 $^{\circ}$ C储存, < 0 $^{\circ}$ C运输。

Store between -30 $^{\circ}$ C and -15 $^{\circ}$ C, and transport at temperatures below 0 $^{\circ}$ C.

注意事项 (Note)

- 1、建议使用时体系pH范围在7.0 - 8.0之间以使得该品活性最大。
- 2、本产品不能抑制RNase H活性。
- 3、避免反复冻融、起泡、剧烈搅拌或涡旋。
- 4、维持本品活性需要不低于1 mM DTT或同等还原剂条件。

- 1.It is recommended that the pH range of the experiment be between 7.0 - 8.0 to maximize the activity of the product.
- 2.This RNase Inhibitor cannot inhibit the activity of RNase H.
- 3.Avoid repeated freeze-thawing, foaming, vigorous stirring or vortexing.
- 4.To maintain the activity of this product, no less than 1mM DTT or equivalent reducing agent conditions are required.