

RNase Inhibitor

(M009)

Product Description

RNase Inhibitor is a recombinant ribonuclease inhibitor expressed in *Escherichia coli*. It binds non-competitively in a 1:1 ratio with RNase A, RNase B, and RNase C to inhibit their activities, thereby protecting RNA from degradation. This product exhibits broad-spectrum RNase inhibitory activity and can protect RNA from degradation at temperatures up to 55 °C.

Component

Cat. No.	Product Name	Volume (M009)
M009	RNase Inhibitor	40 U/μL, 10KU

Definition of Activity

One unit (U) is defined as the amount of enzyme that inhibits **50% of the activity of 5 ng RNase A**. RNase A activity is quantified by measuring the inhibition of hydrolysis of cyclic 2',3'-CMP to 3'-CMP.

Applications

Inhibits RNase activity, prevents degradation of RNA templates, and helps improve product yield.

Shipping and Storage

- Storage: -30 ~ -15 °C, Shipping: ≤ 0 °C

Precautions

1. Active temperature range: **25 ~ 55 °C**; inactivated at 65 °C and above. Foaming or vigorous vortexing causes inactivation.
2. Active over a broad pH range (**pH 5.0–9.0**), with maximum activity at pH 7.0–8.0.
3. Does **not** inhibit RNase H or RNase T1.
4. This product is **for research use only** by qualified professionals.
5. Wear disposable gloves and a mask during laboratory handling.