

FUJIFILM

Wako

Code No. 145-08221 (500 units)

Nuclease P₁ **ヌクレアーゼP₁**

Nuclease P₁ hydrolyzes both 3'-5'-phosphodiester bonds in RNA and heat-denatured DNA and 3'-phosphomonoester bond in mono- and oligonucleotides terminated by 3'-phosphate without base specificity. The enzyme does not attack double-stranded nucleic acids, especially in the presence of more than 400 mmol/L of sodium chloride at pH 6.0.

Source : *Penicillium citrinum*

Appearance : lyophilized powder

Activity : about 500 units/vial (3'-5'-phosphodiesterase activity)

Optimum pH : 5.3 (RNA and heat-denatured DNA)
7.2 (3'-AMP)

Optimum Temperature : Approximately 70 °C
60 °C (long incubation)

Unit Definition : One unit of nuclease activity is defined as the amount of enzyme that produces 1 μ mole of acid-soluble nucleotides from RNA based on ϵ = 10,600 for RNA hydrolyzates per minute at 37 °C, pH 5.3.
One unit of the enzyme liberates $\sim$ 4 μ moles of orthophosphate from 3'-AMP per minute at 37 °C, pH 7.2.

Heat Stability : Stable below 60 °C at pH 5.3 for 30 minutes.

[Storage] 2-10 °C

[Package] 500 units

[Reference]

- 1) Fujimoto, M. *et al.* : *Agric. Biol. Chem.*, **38**, 777, 785, 1555, 2141 (1974).

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