

PRODUCT INFORMATION

Cyanase™ Nuclease, 50 U/μl

Cat. No. 18542

Product Description:

General	Cyanase™ is a cloned highly active non-Serratia based non-specific endonuclease that degrades single and double stranded nucleic acids. Supplied as solution in 50 mM Tris-HCl, pH 8.0, 5 mM MgSO ₄ , 50 % (v/v) glycerol.
Application	Degradation of DNA or RNA, e.g. to reduce the viscosity of protein samples prior to electrophoresis
Features	<ul style="list-style-type: none">• Concentration: 50 U/μl• Active in the pH range from 6 to 10 (pH optimum: 7.5 – 8)• Active in the presence of up to 100 mM NaCl (salt optimum: 20 mM), tolerates also DTT (≤ 100 mM), unaffected by lysozyme, most common non-ionic detergents (≤ 1 % including Triton X-100, Tween 20) and urea (≤ 3 M)• Active in the temperature range of up to 50 °C (temperature optimum: 24 °C – 37 °C)
Stability and storage	Long term storage: -15 °C to -25 °C Cyanase™ can be stored periodically at room temperature for up to 1 year without any substantial loss of activity.
Inhibition/ Inactivation	Cyanase™ is easily removed from samples and inactivated with the Cyanase™ Inactivation Resin (Cat. No. 18543). The resin can be easily filtered or spun down to remove both, the resin and the enzyme, from the sample.
Reaction conditions	Cell lysate clearance: <ul style="list-style-type: none">• 10 - 50 U per g cell lysate (depending on DNA/RNA levels)• Add MnSO₄ to obtain final concentration of 6 mM to the lysis buffer• Add min. 10 U/g cell paste; incubation with cell paste during lysis• Incubation at 24 °C – 37 °C for 30 min• After centrifugation (10 – 15 min) recover supernatant• For enzyme inactivation add Cyanase™ Inactivation Resin (Cat. No. 18543) Nucleic acid removal in protein samples: <ul style="list-style-type: none">• 10 - 50 U per sample (depending on DNA/RNA levels)• Incubation at 30 °C – 37 °C for 10 min in optimal conditions• Add 100 μl Cyanase™ Inactivation Resin per ml sample for enzyme inactivation and removal

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