

RNase A, bovine pancreas

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| Cat. No.: | HY-129046 |
| CAS No.: | 9001-99-4 |
| Target: | Others |
| Pathway: | Others |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |

RNase A, bovine pancreas

SOLVENT & SOLUBILITY

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| In Vitro | H ₂ O : 100 mg/mL (Need ultrasonic) |
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BIOLOGICAL ACTIVITY

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| Description | Ribonuclease A (EC 3.1.27.5) cleaves RNA 3' to pyrimidines and actively cleaves RNA at every pyrimidine residue. Ribonuclease A catalyzes the hydrolysis of single stranded RNA in the absence of metal ions or cofactors ^{[1][2][3]} . |
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| In Vitro | <p>A major application of RNase A is the removal of RNA from plasmid DNA preparations.</p> <p>Preparation of RNase A stock solution</p> <ol style="list-style-type: none"> 1. Use 10 mM sodium acetate (pH 5.2) to prepare 10 mg/mL RNase A stock solution; 2. Heat at 100 °C for 15 min; 3. Cool to room temperature, add 1/10 v/v of 1 M Tris-HCl pH 7.4, adjust the pH to 7.4; 4. The solution can be stored at 20 °C for 2 years. <p>Note: When the RNase A solution is boiled under neutral conditions, RNase precipitate will form; if it is boiled at a lower pH, any precipitation may be caused by the presence of protein impurities. At this time, the precipitate can be removed by high-speed centrifugation (13 000 rpm).</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> |
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REFERENCES

- [1]. Thakur P, et al. Locating chemical modifications in RNA sequences through ribonucleases and LC-MS based analysis. *Methods Enzymol.* 2021;658:1-24.
- [2]. Brown D, Pasloske BL. Ribonuclease-resistant RNA controls and standards. *Methods Enzymol.* 2001;341:648-54.
- [3]. Wallace JA, Shen JK. Predicting pKa values with continuous constant pH molecular dynamics. *Methods Enzymol.* 2009;466:455-75.

Caution: Product has not been fully validated for medical applications. For research use only.

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