Datasheet for ABIN3188237

# RNase R

## Overview

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| Quantity: | 500 U |
| Application: | RNA Modification (RNA Mod) |

## Product Details

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| Characteristics: | RNase R is an E. coli exoribonuclease which exhibits 3'-to-5' exonuclease activity, efficiently digesting nearly all linear RNA species. This enzyme does not digest circular, lariat, or double stranded RNA with short 3' overhangs (less than seven nucleotides). As such, this enzyme is ideally suited to the study of lariat RNA produced by traditional splicing, as well as circRNAs which arise through back-splicing. By removing linear RNAs from cellular or RNA extracts, RNase R greatly facilitates the identification of circular species through RNA-sequencing. This enables researchers to probe the landscape of splicing events with greater depth. |
| Components: | Enzyme supplied with 10X Reaction Buffer |
| Unit Definition: | One unit is defined as the amount of RNase R that converts 1 µg of poly(A) into acid-soluble nucleotides in 10 minutes at 37°C. |

## Application Details

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| Comment: | • Enriching circRNAs in biological samples<br>• Identification of intronic lariat sequences<br>• Identification of exonic circRNAs<br>• Studying alternative splicing<br>• Production of artificial circular RNAs<br>• Reaction: Use 1X RNase R Reaction Buffer and incubate at 37°C. |
| Restrictions: | For Research Use only |

## Handling

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| Concentration: | 10 U/µL |

## Handling

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| Buffer: | 50 mM Tris-HCl ( pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 1 mM DTT, and 50 % (v/v) Glycerol. Reaction Buffer: 200 mM Tris-HCl, 1 M KCl, 1 mM MgCl2, pH 7.5 |
| Storage: | -20 °C |
| Storage Comment: | Store all components at -20 °C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for 1 year from the date of shipping when stored and handled properly. |

## Publications

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| Product cited in: | Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, ( 1991) |