

Just fine Molecular Biology

RNAse mimic (R-mim™) 0,1 ml

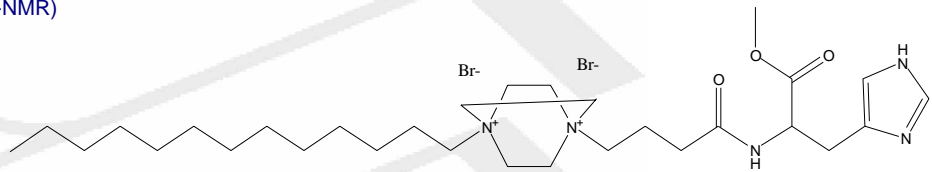
RNAse mimic is a chemically synthesized organic molecule capable to cleave RNA in RNAseA-like manner (1). **R-mim™** molecule designed so, that it imitates the action of RNAseA, digesting RNA mainly at CpA and UpA sequences in single-stranded stretches of RNA. Due to the low molecular weight **R-mim™** may penetrate the secondary structure of RNA, RNA-protein complexes, viral particles and living cells. As compared to enzymes, it withstands a wide range of conditions and do not perturb the object of action.

In contrast to other RNAse-mimetics, **R-mim™** doesn't contain metal ions and therefore does not inhibit enzymes used in molecular biology manipulations (Taq DNA polymerase, restriction endonucleases, polynucleotidekinase etc.).

MW 693.60, Purity 95% (H1-NMR)

R-mim™ chemical structure

R-mim™ gives only highly reproducible results!



R-mim™ has several advantages on the natural RNAseA preparations, namely:

- no unspecific impurities;
- no ballast protein;
- specific activity does not vary from lot to lot;
- the preparation is pure from other RNAses;
- very high stability;
- no inhibition by heating, high salt concentrations (including GuSCN), organic impurities (including phenol);
- no degradation by proteases;
- easy to separate from proteins, DNA, RNA.

Use **R-mim™** for:

- the study of RNA secondary structure
- the study of RNA-protein interaction;
- the cleavage of RNA within the cell, viral particles, RNA-protein complexes
- digestion of RNA in bulk quantities.

1 molecule of **R-mim™** catalyzes the digestion of 150-170 of phosphodiether bonds in RNA for 60 min at 25°C. We recommend using 0,01mM concentration of R-mim in your experiments.

Storage and shipment: room temperature

The following points are to be considered when RNAse mimic is used:

- the concentration of RNA should not be higher than 0,5mg/ml;
- the majority of tests with RNA digestions were done on purified tRNA and viral RNA (both successful), not too much experimets were performed with other types of RNA;
- presence of excess of small RNA molecules may reduce strongly the effectivity of digestion.

ATTENTION: DO NOT FREEZE THE PRODUCT

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Bioron GmbH

Contact: Phone: +49-(0)-621- 5720 915 Fax:+49-(0)-621-5720 916
E-Mail: info@bioron.net NET: www.bioron.net