# Yeast RNA

**Catalog Number** AM7120G

**Pub. No.** 4386510 **Rev.** B

| Contents | Concentration | Amount | Storage | Storage buffer |
|---|---|---|---|---|
| Yeast RNA | 5 mg/mL | 0.5 mL | Store at –20°C, not in a frost-free freezer. | Nuclease-free water |

**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from **thermofisher.com/support**.

## Product description

Invitrogen™ purified *Saccharomyces cerevisiae* Yeast RNA is a very effective blocking agent when used in Northern prehybridization and hybridization buffers at a concentration of 100–200 µg/mL, as well as being suitable as a coprecipitant in nucleic acid precipitations. Yeast RNA, however, is not recommended for precipitating nucleic acid for subsequent use in polynucleotide kinase or terminal transferase reactions, since it would compete with the intended substrate for the enzyme activity. While it cannot be used in reactions inhibited by exogenous RNA, it is the most inexpensive source of a high quality coprecipitant.

## Thaw the RNA

**IMPORTANT!** RNA is very sensitive to degradation by exogenous ribonucleases introduced during handling. Wear gloves when handling this product. Use RNase-free reagents, tubes, and barrier pipette tips.

1. Thaw at 37°C, then vortex briefly.
2. Centrifuge briefly, then place on ice.

Aliquot the RNA to avoid multiple (≤5) freeze-thaw cycles.

## Precipitate nucleic acid

1. Adjust the monovalent cation concentration of the solution (for example, 0.5 M $NH_4OAc$, 0.25 M NaCl, 0.3 M NaOAc).
2. Add Yeast RNA to a final concentration of 10–20 µg/mL and mix well.
3. Mix with 2 volumes of ethanol.
4. Chill for at least 15 minutes at ≤ –20°C.
5. Centrifuge for at least 15 minutes at ≥10,000 × *g*.
6. Carefully remove the supernatant fluid and resuspend the pellet in an appropriate buffer.

   **Note:** Small amounts of nucleic acid are not precipitated quantitatively with Yeast RNA as a carrier when isopropanol is used instead of ethanol. For ethanol precipitation of end-labeled oligonucleotides (such as 35-mers), linear acrylamide or glycogen is a more effective coprecipitant than Yeast RNA.

## Quality control

Yeast RNA is tested in the following quality control assays before and after final packaging.

**Nonspecific endonuclease activity:** A sample is incubated with supercoiled plasmid DNA and analyzed by agarose gel electrophoresis.

**Exonuclease activity:** A sample is incubated with labeled double-stranded DNA, followed by PAGE analysis.

**RNase activity:** A sample is incubated with labeled RNA and analyzed by PAGE.

## Limited product warranty

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