

Check the product label for actual catalog number, lot and expiry date.

## Synthetic Carrier RNA (1 mg/ml and 10 mg/ml solution)

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
SCR01-01	1 ml	1 ml – Synthetic Carrier RNA, 1 mg/ml	RNAse and DNase free, aqueous solution containing synthetic
SCR01-05	5 ml	5 ml – Synthetic Carrier RNA, 1 mg/ml	RNA (polyinosinic acid) at 1 mg/ml concentration. Prepared
SCR01-100	100 ml	100 ml – Synthetic Carrier RNA, 1 mg/ml	with sterile deionized water.
SCR02-01	1 ml	1 ml – Synthetic Carrier RNA, 10 mg/ml	RNAse and DNase free, aqueous solution containing synthetic
SCR02-05	5 ml	5 ml – Synthetic Carrier RNA, 10 mg/ml	RNA (polyinosinic acid) at 10 mg/ml concentration. Prepared
SCR02-100	100 ml	100 ml – Synthetic Carrier RNA, 10 mg/ml	with sterile deionized water.

**Storage** Store at -20°C. Can be stored at ambient temperature up to 2 weeks without changes in absorption. Can be shipped at ambient temperature.  
*High concentration RNA solution may appear gelatinous and it might be difficult to pipet.  
 To reduce the viscosity, warm it in 37°C thermostat for a few minutes, and mix well.*

### APPLICATIONS

- All molecular biology applications where concentration of RNA or DNA solutions is required, such as:
  - all kind of RNA extraction/isolation procedures
  - all kind of low amounts DNA extraction/isolation procedures
  - clean-up and reprecipitation of RNA or DNA solutions

### BENEFITS

- Animal and yeast-free aqueous solution of synthetic RNA
- Inert coprecipitating agent helping to increase the concentration of target nucleic acids in low-concentrated solutions
- Shows no inhibition in RT-PCR, PCR and qPCR reactions
- Supplied as aqueous solution, available in 1 and 10 mg/ml concentration
- Extraordinary stable - can be stored and shipped at ambient temperature without changes in absorption

### PRODUCT DETAILS

highQu Synthetic Carrier RNA is designed to be used in all kind nucleic acid purification and precipitation procedures as a carrier and co-precipitant of nucleic acids. It is especially useful to increase the amount of RNA or DNA pellet in low concentrated solutions, in such procedures, like viral RNA extraction from human specimen samples. Synthetic Carrier RNA works as an inert carrier during alcohol-based precipitation of nucleic acids. In contrast to commonly used carrier RNAs such as tRNA, yeast RNA, or sonicated salmon sperm DNA, the Synthetic carrier RNA has several advantages: it is a pool of synthetic polymer molecules, and guaranteed free from all kind of animal or yeast contamination. Coprecipitated RNA and DNA can directly be used for all kind of downstream applications, such as PCR or RT-PCR, as well as highly sensitive qPCR.

### NOTES

Remember, that the use of carrier RNAs for coprecipitation of nucleic acids may interfere with spectrophotometrical concentration measurements.

The presence of carrier RNAs in the RNA or DNA solution may have some influence on certain enzymatic reactions performed by such enzymes that act on all nucleic acid molecules, for example T4 Polynucleotide Kinase or Terminal DNA Transferase.

### PROTOCOL RECOMMENDATIONS

- Use Synthetic Carrier RNA in DNA or RNA solutions during alcohol precipitation step.
- To maximize the yield of nucleic acids, before adding salt (Sodium acetate) and Ethanol or Isopropanol, first add Synthetic Carrier RNA and mix it well with DNA/RNA sample.
- Use following amounts of Synthetic carrier RNA:  
 Recommended final concentration in precipitation solution is 10–20 µg/ml  
 For example, add 1 µl of 10 mg/ml Synthetic Carrier RNA into 200 µl of RNA or DNA sample which will be precipitated with 3 x volumes of ethanol. Or, alternatively, add 5 µl of 1 mg/ml Synthetic Carrier RNA into 100 µl of RNA or DNA sample which will be precipitated with 3 x volumes of ethanol.

IN VITRO RESEARCH USE ONLY

#### ORDERING

T: +49 7250 33 13 401  
 F: +49 7250 33 11 413  
[order@highQu.com](mailto:order@highQu.com)  
[www.highQu.com](http://www.highQu.com)

#### SALES

T: +49 7250 33 13 401  
 F: +49 7250 33 11 413  
[sales@highQu.com](mailto:sales@highQu.com)

#### TECHNICAL SUPPORT

T: +49 7250 33 13 401  
 F: +49 7250 33 11 413  
[tech-support@highQu.com](mailto:tech-support@highQu.com)