FirstChoice® Human Breast Adenocarcinoma (MCF-7) Total RNA

ambion® by life technologies™

Store at or below –70°C.
Do not store in a frost-free freezer.

Catalog # (Part No.):	AM7846
Amount:	100 µg
Volume:	100 µL
Concentration:	1 mg/mL
Absorbance $_{260/280}$:	1.7–2.1
Storage Conditions:	Store at or below –70°C. Avoid multiple freeze-thaw cycles. Aliquots of the product may be stored short-term at –20°C. ***Do not store in a frost-free freezer.***
Storage Buffer:	THE RNA Storage Solution (1 mM Sodium Citrate, pH 6.4; Part no. AM7000)

USER INFORMATION

Product Description:

FirstChoice® Human Cell Line Total RNA is prepared from cells homogenized in ToTALLY RNA™ Lysis/Denaturation Solution (Part no. AM8540G), flash-frozen in liquid nitrogen, and stored at –80°C until use. RNA is isolated using Ambion® RNA isolation reagents. The purified RNA undergoes a stringent DNase treatment. It has been precisely quantified and is provided at 1 mg/mL in THE RNA Storage Solution (Part no. AM7000). The integrity of the RNA is verified by capillary electrophoresis using the Agilent® 2100 Bioanalyzer™ instrument.

FirstChoice Cell Line Total RNA provides the researcher with access to RNA isolated from a cell line that might otherwise be unavailable or difficult to work with due to small sample size or high RNase content. In addition, the RNA may serve as a positive control when a particular mRNA is known to be expressed in this cell line. FirstChoice Total RNAs are ready for use in RT-PCR, Northern analysis, ribonuclease protection assays, S1 nuclease assays, cDNA synthesis, and in vitro translation. FirstChoice Total RNA is certified to contain small RNAs (miRNA, siRNA, and snRNA).

Handling Instructions:

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.

Thawing Instructions
Thaw just to completion at 37°C, vortex for a few seconds when fully thawed, and place on ice. Aliquot the RNA, if necessary, to minimize freeze-thaw cycles (≤5).

Reference:

1. Soule HD, Vazguez J, Long A, Albert S, Brennan M. (1973) A human cell line from a pleural effusion derived from a breast carcinoma. *J. Natl. Cancer Inst*. **51**: 1409–1416.

QUALITY CONTROL

Exonuclease Activity:

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

Functional Testing:

All Total RNAs undergo accelerated stability testing. RNA integrity is checked on an Agilent® Bioanalyzer™ instrument before and after a 14–18 hr incubation at 37°C. DNA contamination is checked by real-time PCR using a TBP (Tata Box Binding Protein) TaqMan® probe.

OTHER INFORMATION

Safety Data Sheets:

Safety Data Sheets (SDSs) are available from: **www.invitrogen.com/sds** or **www.appliedbiosystems.com/sds**. **Note:** For the SDSs of chemicals not distributed by Life Technologies, **contact the chemical manufacturer**.

Warranty and Liability:

For research use only. Not intended for human or animal therapeutic or diagnostic use.

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