

# GenTegra<sup>®</sup> RNA

**Stabilize RNA samples at ambient temperature for storage, transport, and day-to-day handling**

RNA is unstable — and precious. GenTegra RNA stops RNA degradation at the source by stopping RNase activity as soon as it is added to the RNA solution. GenTegra RNA also prevents hydrolysis and oxidation, while freezing merely slows these processes. Your RNA samples are stabilized in both the liquid form for safer handling, and after drying for shipping or long term storage. GenTegra RNA is like insurance against delays when shipping samples. Delays of a few days or even weeks will not destroy your precious samples, which can happen if the delay exhausts the dry ice or ice packs. Start using GenTegra RNA and stop worrying about the quality of your samples.



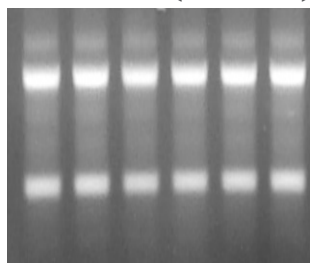
Recovering your sample after storage or shipping is fast and easy. Simply add water to recover 100% of your sample, and it is immediately ready for downstream applications.

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## Long term protection and stability

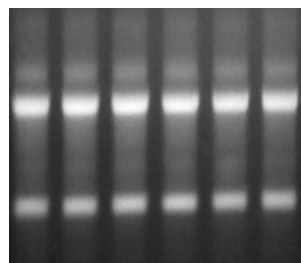
RNA samples stored in the dry state on GenTegra RNA show no degradation after the equivalent of four years of ambient temperature storage<sup>1</sup>.

### Frozen ctrl (RIN = 10)



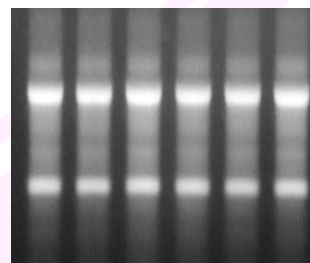
water citrate EDTA  
RIN Score

### 25 °C



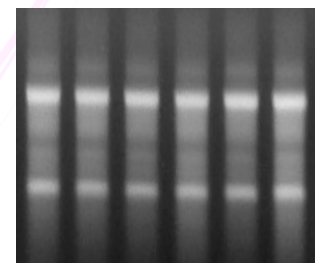
water citrate EDTA  
10 10 10

### 37 °C



water citrate EDTA  
9.6 9.3 9.7

### 56 °C



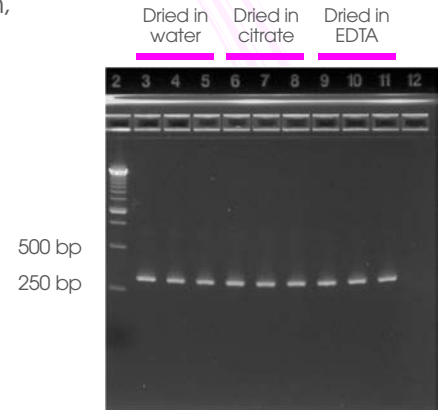
water citrate EDTA  
8 8.1 8.5

2% agarose gels of purified HeLa RNA samples in water, citrate, and EDTA solutions stored frozen (controls) or applied to GenTegra RNA, then air-dried and stored at 25 °C, 37 °C, and 56 °C for six months. High Agilent Bioanalyzer (RIN) scores reveal the high quality of samples preserved on GenTegra RNA.

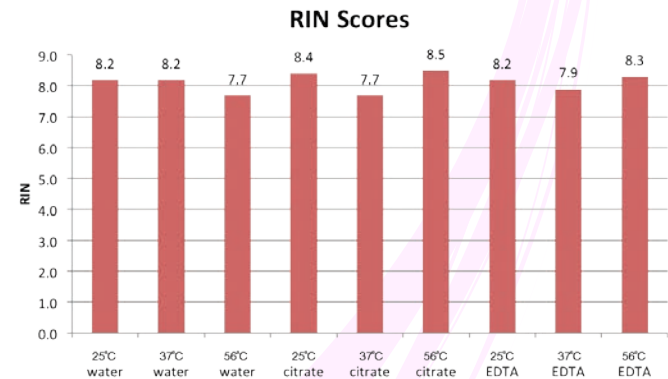
## Ongoing ambient temperature experiments show retention of quality for 3.5 years

After six months of dry state storage at 25 °C, 37 °C, and 56 °C, samples on GenTegra RNA were kept at ambient temperature (25 °C) for three years, duplicating actual storage conditions.

After rehydration, these samples still show no degradation and perform identically to frozen controls in downstream applications.



2% agarose gel of high quality (308 bp) 18S RT-PCR products generated from purified HeLa RNA samples after 3.5 years of mixed temperature, dry state preservation on GenTegra RNA. Initial storage temperatures: lanes 3, 6, and 9 at 25 °C; lanes 4, 7, and 10 at 37 °C; and lanes 5, 8, and 11 at 56 °C.



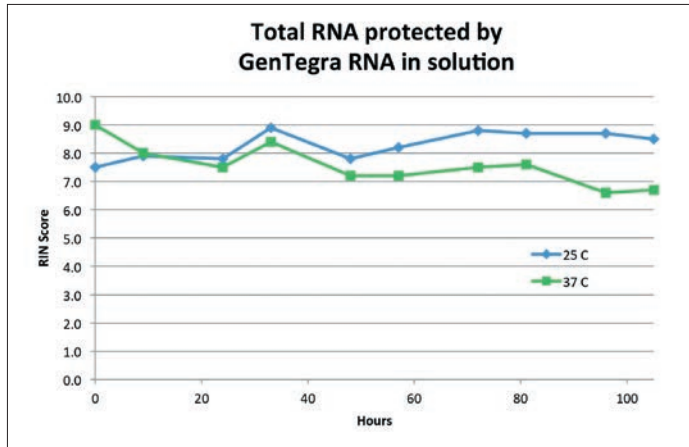
Agilent Bioanalyzer (RIN) scores for purified HeLa RNA samples after 3.5 years of mixed temperature, dry state preservation on GenTegra RNA.

<sup>1</sup> Bruskov, VI. Malakhova, LV. Masalimov, ZK. Chernikov, AV. (2002) Heat-induced formation of reactive oxygen species and 8-oxoguanine, a biomarker of damage to DNA. *Nucleic Acids Research*, 6, 1354-1363.

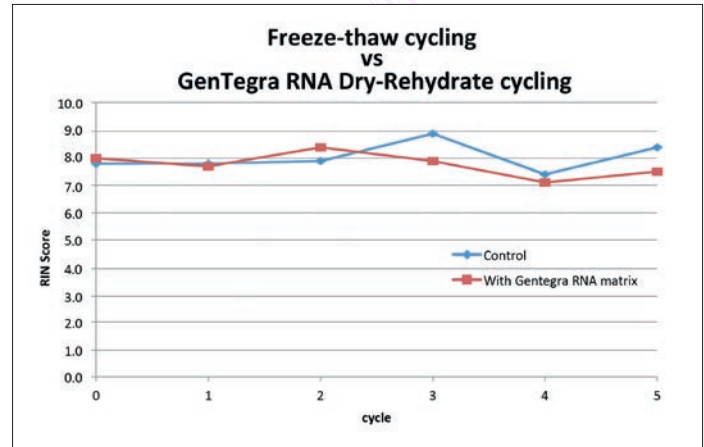
## Protect in solution and dry state

GenTegra RNA protects your samples in three ways. In liquid form, it preserves sample integrity for up to 100 hours at 25 °C. When dried, it stabilizes samples

for indefinite periods of storage at ambient temperature. And, it provides quantitative integrity of samples through several cycles of drying and rehydration.



GenTegra RNA stabilizes Total RNA samples at 25 °C and 37 °C in solution for 100 hours.



GenTegra RNA protects RNA samples through several cycles of drying and rehydration. Control was frozen and thawed for each cycle.

**Stabilize in GenTegra RNA**



**Dry for storage or shipping at ambient temperature**



**Recover by adding water and use in downstream applications**

Product Specification	Product Claims
Format	0.5 mL screw cap tubes 0.3 mL cluster tubes 96-well microtiter plate* Dry bulk
Total RNA application amount	≤ 20 µg
Sample Application Volume	1-50 µl (special handling for samples smaller than 20 µl)
Recovery volume	Equals application volume (20 – 50 µL of molecular biology water)
Stability for transport	Tolerance for extreme temperatures and extreme temperature shifts (-80 °C to 76 °C) Exceeds Military specifications (-60 °C to 71 °C) Exceeds Federal Express® specifications (-51 °C to 60 °C)
Shelf life	3 years (prior to use)
Drying	FastDryer™: Overnight SpeedVac®: 2 – 4 hours, depending on volume/type of SpeedVac Under Biosafety Hood: 14 hours
Recover	>99%

\*barcode optional

# GenTegra

For more info visit our website:

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