# GenTegra®-DNA Active Chemical Protection™

## Stabilize DNA at ambient temperature for transport and storage



### Don't just store your DNA samples, protect them

GenTegra™ DNA protects DNA from hydrolysis and oxidation, stabilizing it for long-term ambient temperature storage, while freezing merely slows these processes.

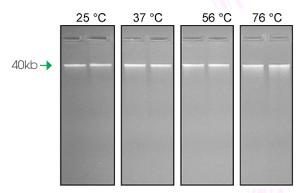
GenTegra DNA is like insurance for storing and shipping your samples, because it stabilizes them for a wide temperature range. Dry ice and cold packs cannot protect your samples during delivery delays, and even a few extra days can cause sample loss. When shipped using GenTegra DNA, your sample is completely protected even after days or weeks of delay. You might even save money on shipping costs and rush charges.

Recovering your sample after storage or shipment is easy. Simply add water to recover 100% of your sample, and it is ready for any downstream application.

Start protecting your samples the better way, using GenTegra DNA.

#### Long Term Protection and Stability

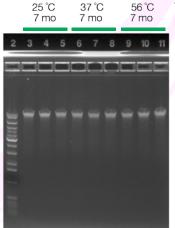
DNA samples stored on GenTegra DNA show no degradation after the equivalent of 16 years storage at ambient temperature. Accelerated stability studies show DNA sample protection with no visible degradation.1



250 ng/lane genomic DNA stored on GenTegra DNA for six months at ambient (25 °C) and elevated temperatures.

#### Ongoing ambient temperature experiments show retention of sample quality at 4.5 years

After an initial six month incubation period at 25 °C, 37 °C, and 56 °C, samples stored on GenTegra DNA were stored at ambient temperature (25 °C) for four years, duplicating actual storage conditions. These samples show no degradation and perform identically in all downstream applications.



25°C

Temperature at initial storage date

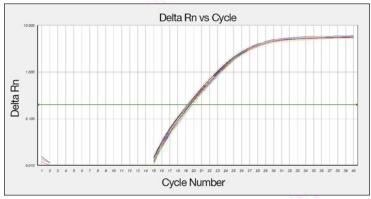
100 ng/lane genomic DNA stored on GenTegra DNA for four years following incubation at three different temperatures.

<sup>&</sup>lt;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.



#### **Quality Retention**

Amplification of mitochondrial DNA in qPCR shows that the 4.5 year old DNA is intact to at least 2.5kb. Ct was normal (19–23 cycles) for all 4.5 year old samples.



Long-range PCR on 4.5 year old DNA samples.

#### Downstream applications supported:

- Transfections
- Quantitative PCR
- Gene expression
- RRN profiling

- Next-generation sequencing
- Genotyping
- HLA typing
- Forensics

Stabilize in GenTegra DNA and dry



Store or transport at ambient temperature



Recover by adding water and use in downstream applications

Product Specification	Description
Format	0.5 mL screw cap tube 0.3 mL cluster tube 1.7 mL microtube snap cap 96-well microtiter plate* Dry bulk
Total DNA application amount	0.05 μg - ≤20 μg
Sample Application Volume	1-250 µl (special handling required for volumes less than 20 µl)
Recovery volume	Equals application volume (20 - 250 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



#### For more info visit our website:

Toll free: 844.540.4000 • Tel: 925.461.3010 • Fax: 925.461.3086 • www.GenTegra.com