



## Reagents for Genomics

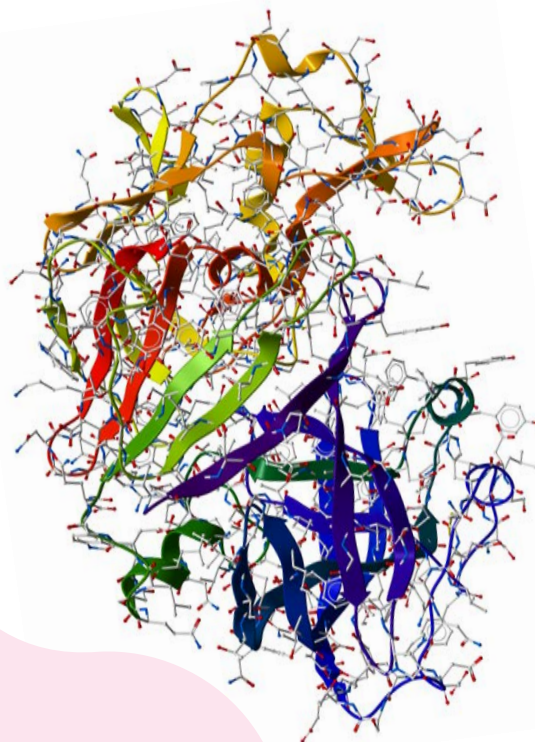
Since the postulation of the Watson-Crick double helix model of DNA, the world of nucleic acids and their importance in every living being has not lost in fascination. This field developed very fast during the last 65 years. With milestones of PCR and sequencing, the work with DNA and RNA has become one of the most important fields for scientists in life sciences.

PanReac AppliChem helps you with products for a clean working space in Nucleic Acids Labs. We provide the most common enzymes used, help with buffers for your work and offer a broad spectrum for assays and analytical tools.

PanReac AppliChem offers the standard enzymes for your work with Nucleic Acids in high quality at a magnificent quality price ratio. These enzymes are used in protocols for purification of DNA, RNA and proteins.

### Enzymes

Description	Code	CAS
DNase I	A3778	9003-98-9
Lysozyme BioChemica	A3711	9001-63-2
Lysozyme for molecular biology	A4972	9001-63-2
Proteinase K	A3830	39450-01-6
Proteinase K solution	A4392	
Proteinase K, recombinant	A7932	39450-01-6
RNase A	A2760	9001-99-4
RNase A (DNase-free)	A3832	9001-99-4
SuperHot Taq DNA Polymerase	A5231	
Taq DNA Polymerase	A5186	
Taq DNA Polymerase DNA-free	A5434	



## Nucleic Acid Decontamination

To work in genomics means to control, dominate and keep your samples clean. You need to be sure to have only the sequence you want to have in your work environment and not the one of your colleague. Also in the forensic world this plays a crucial point. We from PanReac AppliChem offer the DNA Exitus Plus technology: easy to use, very effective, non-toxic to humans and not harmful to equipment.

### Key features

- Catalytic and cooperative effects of the components cause a very rapid non-enzymatic, non-sequence-specific degradation of DNA and RNA molecules.
- All components of DNA-ExitusPlus™ are readily bio-degradable and not harmful or toxic for humans.
- No aggressive mineral acids or alkaline substances are used. Equipment and materials are not damaged or corroded even after prolonged incubation times.
- No toxic fumes.
- Elevated temperatures above approx. 50°C speed up the reaction and the activity.

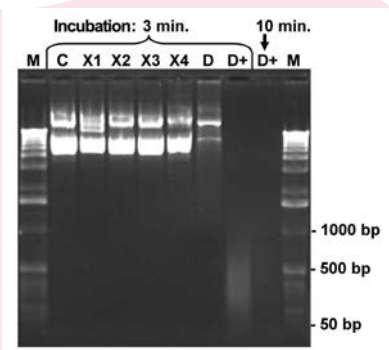


Figure 1

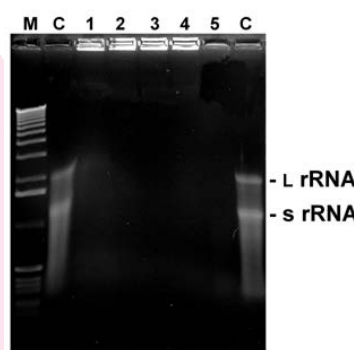


Figure 2

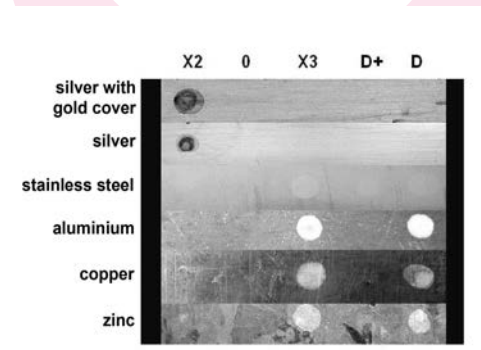


Figure 3

You can see that all the DNA is gone after 10 min of DNA Exitus Plus (Figure 1); also RNA is gone even after 0.5 min (Figure 2); and also compared to other common Decontamination solutions DNA Exitus Plus does not attack your work material (Figure 3).

Description	Code
DNA-ExitusPlus™	A7089
DNA-ExitusPlus™ IF	A7409
Autoclave-ExitusPlus™	A7600
ExitusPlus™ Activity Test	A9411
RNase-ExitusPlus™	A7153



For further information and a simple explaining video go on:  
<https://www.itwreagents.com/rest-of-world/en/nab-decontamination>

## Buffers for nucleic acids

Buffers are the one of the most commonly used substance class in biological science. We from PanReac AppliChem offer you a wide selection of buffer compounds and finished buffers where you only have to add the solvent.

This here is only a selection of the most used buffers. You can find more visiting our website: <https://www.itwreagents.com/rest-of-world/en/nab-buffers>

Description	Code	pH (20°C; H <sub>2</sub> O)	Composition
CTAB - Lysis buffer BioChemica	A4150	8.0 ± 0.1	CTAB ..... 20.00 g/L (2% w/v) EDTA·Na <sub>2</sub> ·2H <sub>2</sub> O ..... 7.44 g/L (20 mM) Tris ultrapure ..... 12.11 g/L (100 mM) Sodium chloride ..... 81.82 g/L (1.4 M)
Guanidine Thiocyanate solution for molecular biology	A0703	7.5 ± 0.2 (25°C)	GuaSCN ..... 708.96 g/L (6 M) Tris ..... 12.11 g/L (0.1 M)
TAE buffer (50X)	A1691	8.5 ± 0.2	EDTA·Na <sub>2</sub> ·2H <sub>2</sub> O ..... 18.61 g/L (0.05 M) Acetic acid glacial ..... 60.05 g/L (1 M) Tris ..... 242.28 g/L (2 M)
TBE buffer (10X)	A0972	8.3 ± 0.2	Boric acid ..... 55.03 g/L (0.89 M) EDTA·Na <sub>2</sub> ·2H <sub>2</sub> O ..... 7.44 g/L (0.02 M) Tris ..... 107.81 g/L (0.89 M)
TE buffer (100X) pH 8.0	A0973	8.0 ± 0.1	EDTA·Na <sub>2</sub> ·2H <sub>2</sub> O ..... 37.22 g/L (0.1 M) Tris ..... 121.14 g/L (1 M)
Tris ultrapure	A1086	10.5 - 11.5 (1M)	
Tris Hydrochloride for molecular biology	A3452	3.5 - 5.0 (0.5 M, 25°C)	





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## Analytics & Assays – Isolation of Nucleic Acids

Here you will only see a selection of products for isolation and analysis of nucleic acids. Find a lot of interesting information on our special product page:

[https://www.itwreagents.com/rest-of-world/en/nab\\_analytics-and-assays](https://www.itwreagents.com/rest-of-world/en/nab_analytics-and-assays)

### TRIidty G™, code A4051

Ready-to-use solution for simultaneous isolation of RNA, DNA and proteins.

- Monophasic reagent (contains phenol and guanidinium thiocyanate)
- Suited for small and large samples.
- For samples of human, animal, plant and bacterial origin.
- Isolation of intact total RNA from tissue and cells, sequential precipitation of DNA and proteins.
- Improved version of the 'single-step' RNA-isolation method developed by Chomczynski & Sacchi.
- Isolation of large and small RNA-species (0.1 - 15 kb) with high purity.



*Purity and integrity of the DNA will affect the results of all subsequent applications, so highest quality of DNA is desirable for diagnosis and research.*

Further frequently used products for Isolation and Analysis:

Description	Code
Agarose Basic	A8963
Agarose low EEO (Agarose Standard)	A2114
Agarose medium EEO	A2116
Agarose MP	A1091
DNA Isolation Spin-Kit Agarose	A5193
Loading buffer DNA IV (for Agarose gels)	A3481
Ethidium Bromide BioChemica	A1151
Ethidium Bromide solution 1% BioChemica	A1152
Ethidium Bromide solution 0.07% "dropper-bottle"	A2273

Description	Code
DNA-Dye NonTox	A9555
DNA Ladder 50 bp	A8368
DNA Ladder 100 bp	A5191
DNA Ladder 100 bp (lyophilised)	A3470
DNA Ladder 100 bp plus	A5216
DNA Ladder 1 kb	A5207
DNA Ladder Mix 100 - 5000 (lyophilised)	A3660
DNA Marker Phage Lambda - Sty I	A5194

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