PanReac AppliChem
ITW Reagents

bestOffer

This offer is only valid with the indication of the code:
APPLINUC

Nucleic Acid Biochemistry Genomics Promotion

1st October– 31st December 2017

Up to -50%

DNA Decontamination

DNA-Exitus Plus & DNA-Exitus Plus IF
A7089 & A7409

Decontamination solution for the removal of DNA and RNA contaminations

-30%

- Removes DNA and RNA contamination from surfaces
- For cleaning of PCR workstations and equipments
- For cleaning of electrophoresis equipments, pipettes, reaction tubes etc.
- Delivered as spray bottles or as refill bottles (RF)

The special features

- Non-enzymatic degradation of DNA and RNA by catalytic and cooperative effects
- All components are readily biodegradable and not harmful or toxic for humans.
- Doesn't contain aggressive mineral acids or alkaline substances
- No toxic fumes. Contains low concentration of alcohol.

RNase-Exitus Plus
A7153

RNase decontamination solution

-30%

- For cleaning of laboratory surfaces
- For cleaning of electrophoresis equipment, pipettes, reaction tubes etc.

Special, new features

- Non-enzymatic degradation of RNase by catalytic and cooperative effects of the components
- All components are readily biodegradable and not harmful or toxic for humans.
- Doesn't contain aggressive mineral acids or alkaline substances
- No toxic fumes. Contains low concentration of alcohol.

-20%

Description	Code	Application
Exitus Plus Activity assay	A9411	Color-coded test strips for DNA-ExitusPlus™ activity
Autoclave-Exitus Plus	A7600	For nucleic acid decontamination in autoclaves

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Nucleic Acid Biochemistry Genomics Promotion

Buffers and Reagents

All -30%

Description	Code	Application
CTAB – Lysis buffer BioChemica	A4150	The cationic detergent cetyltrimethylammonium bromide (CTAB) is used to liberate and complex with total cellular nucleic acids. CTAB forms an insoluble complex with nucleic acids when the initial NaCl concentration is lowered to ~ 0.5 M. Polysaccharides, phenolic compounds and other enzyme-inhibiting contaminants found in plant cells are efficiently removed in the supernatant because most do not precipitate under these conditions.
SSC buffer (20X) for molecular biology	A1396	There are two major applications of SSC. This buffer is used for the denaturation of DNA for the screening of DNA libraries. The second major application is the use of SSC as transfer buffer for the blotting of DNA after agarose or polyacrylamide gel electrophoresis onto nitrocellulose or nylon membranes (Southern-Blot).
TAE buffer (50X)	A1691	TAE buffer is the most commonly used running buffer for agarose gels. Today, TAE is used in a modified composition (40mM Tris-acetate; 1 mM EDTA · Na_2; ~pH 8.5 at room temperature). TAE has a lower buffering capacity than TBE, but double-stranded, linear DNA migrates approximately 10 % faster through TAE than TBE with the same resolution. The resolution of supercoiled DNA is better in TAE than TBE. Because of its low buffering capacity, it may become exhausted during long periods of time at high current. Therefore TAE should be replaced during extended electrophoresis or should be recirculated. An advantage of TAE over TBE is the absence of interactions with agarose, resulting in a higher yield of nucleic acids in preparative agarose gel electrophoresis.
TAE buffer (50X) for molecular biology	A4686	
TBE buffer (10X)	A0972	TBE is employed as an electrophoresis buffer for acrylamide gels and agarose gels for the separation of nucleic acids and, in case of 'simple' applications, for the separation of proteins. It is used in the pH range of 8.0 to 8.5. Less than half of the Tris and boric acid molecules are ionized, so that the ionic strength is much lower than the concentration of the buffer components. The ionic strength determines the electric current.
TBE buffer (10X) for molecular biology	A3945	

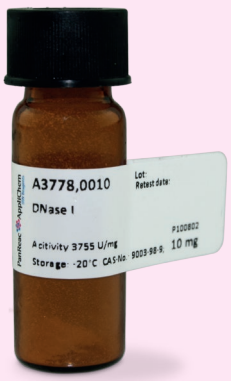
Enzymes

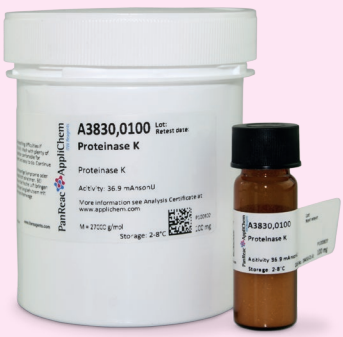
All -30%

Description	Code	Application
DNase I	A3778	Deoxyribonuclease I (DNase I) from beef pancreas is an endonuclease (glycoprotein), which preferentially cleaves the phosphodiester bond in the DNA behind pyrimidine nucleotides. The enzyme is used in molecular biology techniques like digestion of DNA, in the RNA purification.
Lysozyme BioChemica	A3711	Lysozyme (muramidase) preferentially hydrolyses the ß-1,4-glycosidic binding between N-Acetyl muramic acid and N-Acetyl glucosamine, a component of the proteoglycan-cell wall of certain microorganisms. The enzyme is present in many organisms. In molecular biology, the enzyme from chicken egg white is used to lyse *E. coli* for the isolation of plasmid-DNA.
Lysozyme for molecular biology	A4972	
Proteinase K	A3830	Proteinase K belongs to the family of the subtilisin type serine proteases. It shows endo- and exoproteolytic activity. Activated by calcium (1-5 mM), the enzyme cleaves proteins preferably behind hydrophobic amino acids (aliphatic, aromatic and other hydrophobic amino acids). Proteins will be completely digested, if the incubation time is long enough and the protease concentration is high. Temperatures above 65°C or the serine proteinase inhibitors AEBSF, PMSF or DFP inhibit the activity. Proteinase K is used to destruct proteins in cell lysates (tissue, cultured cells) and to liberate nucleic acids, since it very effectively digests DNases and RNases.
Proteinase K solution	A4392	
Proteinase K, recombinant	A7932	
Taq DNA Polymerase	A5186	Taq DNA Polymerase is a thermostable enzyme of approximately 94 kDa isolated from the eubacterium *Thermus aquaticus* strain YT-1. This unmodified enzyme replicates DNA at 72°C. The enzyme catalyzes the polymerization of nucleotides into duplex DNA in the 5′ → 3′ direction in the presence of magnesium ions. Besides it possesses a 5′ → 3′ exonuclease activity. The enzyme is highly purified and is free of nonspecific endo- or exonucleases.

All -20%

Description	Code	Application
RNase A (DNase-free)	A3832	Ribonuclease A (RNase A) is an endoribonuclease, that specifically cleaves single-stranded RNA 3′ to pyrimidine residues (cytosine, uracil). Thereby, it generates pyrimidine-3′-phosphate or oligonucleotides with terminal pyrimidine-3′-phosphates. The pH-optimum is in the range of 7.0 -7.5. RNase A is used for the purification of RNA-free DNA, for the removal of non-hybridized regions of RNA.





Specialties

TRItidy G™
A4051

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

-50%

TRItidy G™ is a reagent, based on the Chomczynski method, with additional modifications to improve the purity of the RNA, DNA and proteins. First, the RNA will be selectively retained in the aqueous phase during the acidic GuaSCN/Phenol extraction, while DNA and proteins stay in the organic phase and interphase, respectively . The DNA is isolated from the interphase/ organic phase by a simple ethanol precipitation and proteins from the remaining organic phase.

DNA-Dye NonTox
A9555

Non-hazardous Ethidium bromide substitute

-20%

- Loading buffer with highly sensitive DNA dye
- Contains three tracking dyes
- Visualization of DNA with blue light und UV light
- Ready-to-use: supplied as 6X loading buffer

Agarose low EEO (Agarose Standard)
A2114

Used for analytical and preparative gels

-30%

This Agarose low EEO Standard has a very low EEO value and is recommended for the preparation of **gels** with a very good resolution of nucleic acid fragments with sizes larger than 1000 bp (at higher concentrations even less than 1000 bp). It may be used at concentrations between 0.8 and 2 %. Agarose Low EEO has a very low DNA binding capacity and is suited for blotting experiments (Northern, Southern, ...), control of restriction digests etc. and can be used in all buffer systems.

-30%

Description	Code	Application
Ethidium Bromide solution 0.07 % "dropper-bottle"	A2273	Dropper Bottle for easy and safe application.
Blue Taq PCR Master Mix	A9815	Blue TaqPCR Master Mix is an optimized ready-to-use PCR mixture of Taq DNA Polymerase, ready-for-gel PCR buffer, $MgCl_2$ and dNTPs. The ready-for-gel PCR buffer contains a blue and yellow tracking dye and a high density agent for direct loading PCR product onto agarose gel. The Master Mix contains all components for PCR, except DNA template and primers.

Promotion valid from 1st October to 31st December 2017

BO-019

AppliChem GmbH
Ottoweg 4
DE-64291 Darmstadt
Germany
Phone +49 6151 9357 0
Fax +49 6151 9357 11
info.de@itwreagents.com

Nova Chimica Srl
Via G. Galilei, 47
I-20092 Cinisello Balsamo
(Milano) Italy
Phone +39 02 66045392
Fax +39 02 66045394
info.it@itwreagents.com

PanReac Química SLU
C/ Garraf 2, Polígono Pla de la Bruguera
E-08211 Castellar del Vallès
(Barcelona) Spain
Phone +34 937 489 400
Fax +34 937 489 401
info.es@itwreagents.com

www.itwreagents.com