

Specification

DNA-ExitusPlus™

A7089

Product Code:	A7089
Product Name:	DNA-ExitusPlus™
Specifications:	<ul style="list-style-type: none"> : • removes DNA and RNA contaminations from surfaces : • for cleaning of PCR work stations and equipment : • for cleaning of electrophoresis equipment, 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 of the components : • All components of DNA-ExitusPlus™ are readily biologically degradable and not harmful or toxic for humans. : • Doesn't contain aggressive mineralic acids or alkaline substances : • No toxic fumes. Contains low concentration of alcohol. <p>Functionality (Strand breakage test): passes test</p> <p>Efficacy (ExitusPlus™ activity test): passes test</p>
WGK:	1
Storage:	RT protected from light
CS:	38220000

AppliChem GmbH

Comment

DNA amplification is one of the most commonly used techniques in the modern research laboratory. The presence of contaminating DNA in and around PCR workstations can lead to unwanted artifacts during amplification. Principally, there are two ways to make DNA not amplifiable: 1. by degradation of the DNA (e. g. by the addition of DNases or chemical destruction), or 2. by modification of bases - leaving the DNA strand intact, but blocked for reading by polymerases. Using a DNA strand break assay (designed by multiBIND biotec GmbH, Germany), it has been shown that not all DNA decontamination solutions on the market totally degrade DNA! DNA-ExitusPlus™ is an improvement over those products and causes both strand breakages as well as degradation. When used properly at the work area, it totally eliminates the amplification of non-target DNA. DNA-ExitusPlus™ is a non-alkaline, non-corrosive and non-carcinogenic cleansing solution which is effective on all surfaces. A severe disadvantage of conventional decontamination reagents is revealed in a new test for the corrosive potential of their components. For this purpose, different metal plates were incubated for 20 minutes with identical aliquots of the reagents. The selected metals are representative for equipment and materials found in laboratories. The result of this corrosion test show that all known commercial products contain aggressive chemical substances with corrosive, harmful or even toxic effects. These conventional reagents are known to contain azides, mineralic acids like phosphoric acid or hydrochloric acid, aggressive peroxides or strong alkaline substances like sodium hydroxide. Even after an incubation of only 20 minutes, irreversible damages of the metal surfaces are observed in many cases. The newly developed solution DNA-ExitusPlus™ exhibits its unique characteristics especially in this corrosion test. For all metal surfaces tested, no damage or corrosion is observed after treatment. DNA-ExitusPlus™ was also tested under identical conditions on many different plastic surfaces without any indications of damage. DNA-ExitusPlus™ is a registered trademark of AppliChem GmbH.

Bibliography

(1) Esser, K.-H. et al. (2006) *Nature Methods* **3(2)**, 151 DNA decontamination: DNA-ExitusPlus in comparison with conventional reagents.