

# GenUP™ Exo SAP Kit

LOT: See product label EXPIRY DATE: See product label

## ORDERING INFORMATION

CAT. NO.	SIZE	PACKAGE CONTENT
BR0701801	100 rxn	200 μl Exol-SAP
BR0701802	500 rxn	1 ml Exol-SAP
BR0701803	2000 rxn	4 × 1 ml Exol-SAP

COMPONENT	COMPOSITION
Exol-SAP	Exonuclease I and SAP in storage buffer containing 50% glycerol (v/v).

**STORAGE** 

-20°C (until expiry date - see product label)

## **FEATURES**

- Fast 15 min PCR cleanup without the need for spin columns
- 100% recovery no loss of PCR product
- Simple process just add Exonuclease 1 and Shrimp Alkaline Phosphatase to PCR mix
- · Easy scalability and automation

## **APPLICATIONS**

- PCR cleanup prior to sequencing or genotyping
- Removal of nucleotides and primers from PCR reaction

## GenUP™ Exo SAP Kit

### **DESCRIPTION**

biotechrabbit™ GenUP Exo SAP Kit is designed for quickly and easily cleaning up PCR amplification reactions, enabling their direct use in sequencing or genotyping.

The kit provides a combination of Shrimp Alkaline Phosphatase (SAP) and Exonuclease 1 (Exol) for removing nucleotides and primers. Double-stranded DNA is not affected, ensuring 100% recovery of PCR products.

Both enzymes are active in PCR buffers and completely inactivated by heating at 80°C: no further processing is required. Shrimp Alkaline Phosphatase dephosphorylates nucleotides and primers, and the  $3' \rightarrow 5'$  exonuclease activity of Exonuclease 1 degrades single-stranded primers.

## MATERIALS SUPPLIED BY THE USER

- · Reaction tubes
- Pipet tips

### SHORT PROTOCOL

STEPS SCHEME

• Add 2 µl Exol-SAP to 5 µl of a completed PCR reaction.



- Incubate at 37°C for 5 min.
- Heat inactivate at 80°C for 10 min.



at 4°C, for long-term storage at-20°C.

## PROTOCOL FOR CLEANING-UP PCR PRODUCTS

**PROCEDURE** 

or genotyping.

<ul> <li>Transfer 5 μl of a completed PCR amplification to a new reaction tube.</li> <li>Add 2 μl Exol-SAP.</li> <li>Incubate at 37°C for 5 min.</li> </ul>	<ul> <li>Volumes may be scaled proportionally.</li> <li>Heating steps may conveniently be performed in a suitably programmed thermocycler.</li> <li>Process can be automated.</li> </ul>
Heat inactivate at 80°C for 10 min.	<ul> <li>In a standard thermocycler, adjusting the temperature from 37°C to 95°C and back to 37°C is sufficient to completely inactivate the enzymes.</li> </ul>

• The cleaned PCR reaction is ready for sequencing • For short-term storage, keep PCR mixture

**NOTES** 

## GenUP™ Exo SAP Kit

## **CERTIFICATE OF ANALYSIS**

**Quality Control** 

Shrimp Alkaline Phosphatase

Specificity

SAP Removes 5'-phosphates from DNA, RNA, dNTPs and proteins.

Purity

Purified to apparent homogeneity. SAP is highly pure and tested free of contaminating nucleases.

Exonuclease 1

Specificity

Exol is a 3'-5' exonuclease, specific for single stranded DNA.

Purity

Purified to apparent homogeneity. Exol is highly pure and tested free of contaminating nucleases.

Quality confirmed by: Head of Quality Control

#### SAFETY INSTRUCTIONS

For safety instructions please see Safety Data Sheets (SDS)/Sicherheitshinweise finden Sie in den SDS unter: http://www.biotechrabbit.com/support/documentation.html.

#### **USEFUL HINTS**

- Visit Applications at www.biotechrabbit.com for more products and product selection guides.
- Most biotechrabbit products are available in custom formulations and bulk amounts.

#### CONTACT BIOTECHRABBIT

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