# ExS-Pure™

## PCR Cleanup Kit

- Direct replacement for ExoSAP-IT™ Express
- 5 minute protocol
- Removes primers and dNTPs from PCR products
- Newest generation of heat-labile enzymes
- Add directly to your PCR product
- Easily incorporated in automated workflows
- 100% sample recovery



NimaGen's ExS-Pure™ Enzymatic PCR cleanup is designed for fast and easy PCR cleanup. The reagent kit consists of two recombinant hydrolytic enzymes: Exonuclease-I and Shrimp Alkaline Phosphatase. Combined they eliminate all unwanted dNTP's and residual primers from your PCR products, which would interfere with downstream applications, such as sequencing, SNP analysis, genotyping or cloning.

#### **Principle**

Exonuclease I has a strong 3' to 5' exonuclease activity. When introduced to a reaction mixture at 37°C, it degrades singlestranded primer oligonucleotides while leaving the doublestranded PCR products unaffected. Shrimp Alkaline Phosphatase deactivates dNTPs, by removing 5'-phosphates. Both enzymes can be 100% inactivated by heating to 90°C for 1 minute. The combination of the two enzymes ensures complete dephosphorylation of dNTP's and degradation of residual primers, without the need of buffer change.

#### Straightforward workflow

Minimal hands-on time: just add ExS-Pure™ to your PCR product and the cleanup is performed in a standard thermal cycler within 5 minutes.

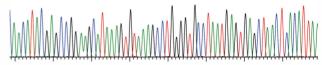
#### 100% Sample recovery

With ExS-Pure™ there is no need for time-consuming gel, column or magnetic bead purifications. Both short and long stranded PCR products are left completely intact.

#### Maximize your data quality from PCR products

DNA sequencing, SNP analysis and many other applications require PCR products which are free of dNTP's and primers. For DNA sequencing, unincorporated primers and dNTP's can lead to high background and miscalling of bases. With ExS-Pure™ you can efficiently remove these contaminants and make improvements in read length and base calling.

High sequence Quality after ExS-Pure™ Cleanup



Chromatogram shows a sample, sequenced with NimaGen's BrilliantDye® v1.1 Cycle sequencing kit and NimaPOP-7™ polymer on a 3130 Genetic Analyzer

### ExS-Pure<sup>™</sup> workflow



Add ExS-Pure™ to your PCR products



Incubate



Enzymatic reaction



Stop reaction (inactivate enzymes)



Ready to go



Ready for downstream applications

- For research use only -



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