ExS-Pure™ Enzymatic PCR Cleanup Kit

Quick Reference Card

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Product and Company Information

Product name: ExS Pure™ Enzymatic PCR Cleanup Kit
Product use: For Research Use Only
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Description

ExS-Pure™ Enzymatic PCR cleanup kit is an ultra-fast method that degrades primers and nucleotides (dNTP'S) from PCR products, to make it ready for downstream applications, such as Cycle Sequencing.

The kit contains two novel enzymes:

Recombinant, Heat Labile Shrimp Alkaline Phosphatase: Dephosphorylates nucleotides, making them inactive in downstream processing. It is crucial to remove any excess of dNTP's in the template, since those may unbalance the reaction mix in cycle-sequencing or other downstream applications.

Recombinant, Heat Labile Exonuclease I: Degrades single-stranded DNA (including oligonucleotide primers), in order to get clean sequence traces without background from the unwanted strand, generated by traces of the original PCR primers.

Both enzymes are fast, robust and heat labile, enabling PCR product cleanup in only minutes time, without the need for adjusting buffer conditions, followed by and an ultra-fast, 100% inactivation. The reaction takes place in a single tube and recovers 100% of the PCR product, including very small PCR products.

Protocol

Important: Keep ExS-Pure mix on ice or in a cooling block during the procedure.

1. Mix 5 µl of PCR product with 2 µl of ExS-Pure
2. Place tubes in Thermal Cycler with heated lid, to prevent evaporation
3. Incubate 4 minutes at 37°C to perform enzymatic purification
4. Heat Inactivate 1 minutes at 90°C → Hold at 4°C
5. The PCR product is now ready for sequencing. Taking care of the concentration, a further dilution step maybe required. Purified PCR products may be stored at -20°C.

Rule of thumb: Optimal template input (ng) in a BrilliantDye™ Terminator Cycle Sequencing reaction can be calculated by dividing the PCR product length (bp) by 50. Example: Use 10 ng of PCR product with a length of 500 bp as template.