Faster time-to-results with the MicroSEQ ID Purification Combo Kit v2.0

Introduction
The improved Applied Biosystems™ MicroSEQ™ ID Purification Combo Kit v2.0 includes the ExoSAP-IT™ Express reagent and MicroSEQ™ ID Ultra Sequencing Clean-Up kit in plate format (Cat. No. A35852) or 8-strip format (Cat. No. A35854). These reagents provide thorough and convenient post-PCR and post-sequencing clean-up. The use of ExoSAP-IT Express reagent reduces post-PCR clean-up time from 30 minutes to 5 minutes and produces results equivalent to those of ExoSAP-IT reagent.

ExoSAP-IT Express reagent removes unincorporated dNTPs and primers remaining in the post-amplification PCR mix, in 5 minutes. The MicroSEQ ID Ultra Sequencing Clean-Up kit provides a convenient and simple way to remove dye terminators, dNTPs, and salts, as well as residual primers from cycle sequencing reactions. The end products can then be directly used for sequencing on any Applied Biosystems™ genetic analyzer.

Equivalent results with reduced processing time
A study was conducted to compare the performance of the ExoSAP-IT and ExoSAP-IT Express reagents coupled with the MicroSEQ ID Ultra Sequencing Clean-Up kit in the microbial identification workflow. Eight replicates of different bacterial species were sequenced with both the Applied Biosystems™ MicroSEQ™ 500 bp and full-gene kits, each with ExoSAP-IT and ExoSAP-IT Express reagents. Additionally, 8 replicates of different fungal or yeast species were sequenced using an Applied Biosystems™ MicroSEQ™ fungal identification kit using ExoSAP-IT and ExoSAP-IT Express reagents.
Table 1 shows equivalent results for ExoSAP-IT reagent and the improved ExoSAP-IT Express reagent. Results are based on the specified acceptance criteria for specimen score, percent match, and consensus sequence length.

### Table 1. Comparison of identification results using ExoSAP-IT and ExoSAP-IT Express reagents.

<table>
<thead>
<tr>
<th>Enzyme</th>
<th>Bacterial species, 500 bp sequencing</th>
<th>Number of test samples</th>
<th>Number of samples with specimen score ≥40</th>
<th>Number of samples with percent match ≥99.80%</th>
<th>Number of samples with consensus length ≥476</th>
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<tbody>
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<td>Streptococcus mitis</td>
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<tr>
<td>Enzyme</td>
<td>Bacterial species, full-gene sequencing</td>
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<tr>
<td>Enzyme</td>
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Conclusions
Samples treated with the ExoSAP-IT and ExoSAP-IT Express reagents produced very similar sequencing results, and the correct identification results. The use of ExoSAP-IT Express reagent in the MicroSEQ ID Purification Combo Kit v2.0 reduces the post-PCR purification time from 30 minutes to 5 minutes and shortens time-to-results.

Ordering information

<table>
<thead>
<tr>
<th>Product</th>
<th>Contents</th>
<th>Quantity</th>
<th>Cat. No.</th>
</tr>
</thead>
</table>
| MicroSEQ ID Purification Combo Kit v2.0, Plates | ExoSAP-IT Express reagent  
MicroSEQ ID Ultra Sequencing Clean-Up Plate | 100 reactions  
One 96-well plate (96 rxns) | A35852 |
| MicroSEQ ID Purification Combo Kit v2.0, 8-Well Strips | ExoSAP-IT Express reagent  
MicroSEQ ID Ultra Sequencing Clean-Up 8-Well Strips | 100 reactions  
12 x 8-well strips (96 rxns) | A35854 |

Find out more at thermofisher.com/microseq