QuickStep™*2* 96-Well PCR Purification Kit

Product	Catalog #	Purifications
QuickStep***2*** 96-Well PCR Purification Kit (2 Plates)	61303	192
QuickStep***2*** 96-Well PCR Purification Kit (10 Plates)	97670	960

Description

The QuickStep***2*** 96-Well PCR Purification Kit delivers highly purified DNA that can be immediately used for further amplification, cloning and sequencing reactions. The kit consists of two purifying reagents: an improved patented **SOPE™** (**S**olid-phase **O**ligo/**P**rotein **E**limination) Resin that binds primers, ssDNA, enzymes, and other proteins; and the PERFORMA® Ultra 96-Well Plate that eliminates up to 99% of salts, buffers, dNTPs, and other small molecules. Best results are obtained when using PCR reaction volumes of 20-50 µl.

Kit Components	61303	97670
SOPE Resin	3.5 ml (PN 4050173)	12 ml (PN 4050174)
Performa Ultra 96-Well Plate	2 plates (2 x PN 4050207)	10 plates (10 x PN 4050207)
96-Well Plate Lids	2 lids (PN 4050094)	10 lids (2 x PN 4050095)
96-Well Flat Bottom Polystyrene Plates	2 plates (PN 4050096)	10 plates (2 x PN 4050097)
96-Well V-Bottom Polypropylene Plates	2 plates (PN 4050098)	10 plates (2 x PN 4050099)

Equipment and Materials Required

1. Variable speed centrifuge (benchtop or floor model) capable of 850 *x g*.
2. Rotor and microplate carriers for above. The microplate carriers must be able to accommodate a deep-well plate.

Storage Condition

Store the SOPE Resin and the Performa Ultra 96-Well Plates at +4ºC. Do not freeze.

Quality Control

Tested for DNA recovery, primer, protein and salt removal.

Recommended Protocol

1. Add deionized water to PCR reactions of <20 µl so that the final volume is 20 µl.
2. Briefly vortex the SOPE Resin to mix.
3. Add 1/5 volume (relative to the volume of the PCR reaction) of SOPE Resin directly to the PCR reaction mixture as in the table below.

SOPE Volume	Reaction Volume
4 µl	20 µl
6 µl	30 µl
8 µl	40 µl
10 µl	50 µl

4. Mix well. Let the suspension stand at room temperature while preparing the Performa Ultra 96-Well Plate.
5. Remove adhesive plate sealers from the top and bottom of the Performa Ultra 96-Well Plate. Cover with a lid.
6. Stack the Performa Ultra 96-Well Plate on top of the 96-well flat–bottom microplate.
7. Place the assembly in a cushioned centrifuge plate carrier.
8. Centrifuge for 5 minutes at 850 *x g*.
   - Note: See “Additional Notes” for determination of RPM from RCF or visit our website at www.edgebio.com and click on Technical Support.
9. Transfer the SOPE/PCR reaction mixture by slowly pipetting directly to the wells of the Performa Ultra 96-Well Plate. Be sure fluid runs into the gel matrix. Cover with a lid.
10. Stack the Performa Ultra 96-Well Plate on top of the 96-well V–bottom microplate.
11. Place the assembly in a cushioned centrifuge plate carrier.
12. Centrifuge for 5 minutes at 850 *x g*. Retain eluates.

Additional Notes

Conversion of RCF to RPM Calculation:

An accurate determination of the centrifugation speed is very important. The relative centrifugal force (RCF) specified in the protocol is converted to revolutions per minute (RPM) using the following formula:

$$RCF = 1.12\, r \left(\frac{RPM}{1000} \right)^2$$

The radius, r, is equal to the distance in millimeters between the axis of rotation and the bottom of the gel bed when the plate is placed in the plate carrier in the centrifuge bucket.

After measuring the radius for the specific centrifuge and accessories to be used, the proper RPM setting is calculated as follows:

$$RPM = 1000 \sqrt{\frac{RCF}{1.12\, r}}$$

To achieve RCF = 850 *x g*:

$$\boldsymbol{RPM} = 27{,}549 \sqrt{\frac{1}{r}}$$