

	<b>Product Information Sheet</b>	Page 1 of 3
	<b>PIS-059 EB-PPK-Preps</b>	Version: 002 Effective Date: 07/06/20 Author: Beth Lowe CO#: 062520-1

**Print only page 2-3 for Customers**

**Concentration:** Not Applicable

**Storage and Handling:**

Store at room temperature upon arrival. Dissolve any precipitates that may form in the CP buffer by warming the solution at 37°C and gently shaking.

**Ordering Information:**

Item Number	Preparations	Number of Tubes and Volumes
EB-PPK-50	50	EB-PPK Elution Buffer: 1x10mL, EB-PPK DNA Wash Buffer: 1x15mL, EB-PPK CP Buffer: 1x40mL, EB-PPK 2mL Collection Tubes: 50, EB-PPK High-Bind DNA Mini Columns: 50
EB-PPK-200	200	EB-PPK Elution Buffer: 1x20mL, EB-PPK DNA Wash Buffer: 3x25mL, EB-PPK CP Buffer: 1x150mL, EB-PPK 2mL Collection Tubes: 200, EB-PPK High-Bind DNA Mini Columns: 200

**Product Description:**

EB Pure PCR Purification Kit is a convenient system for the fast and reliable purification of PCR products. The key to this system is the High-Bind matrix that specifically, but reversibly, binds DNA or RNA under optimized conditions allowing proteins and other contaminants to be removed. Then nucleic acids are easily eluted with deionized water or a low salt buffer. This kit is used to recover DNA bands from 100 bp to 10 kb free of oligonucleotides, nucleotides, and polymerase with yields exceeding 80%. Purified DNA can be directly used for most downstream applications including T-A ligations, PCR sequencing, restriction enzyme digestion, or various labeling reactions.

**Additional Materials and Equipment to be Supplied by User:**

- Microcentrifuge capable of at least 13,000 x g
- Nuclease-free 1.5 mL microcentrifuge tubes
- 100% ethanol
- For fragments < 200 bp, 100% isopropanol
- Vortexer
- Optional: Sterile deionized water or TE Buffer
- Optional: Compatible vacuum manifold

**Preparation Procedure:**

Prepare DNA Wash Buffer:

- For EB-PPK-50 Kits add 60mL of 100% Ethanol to the DNA Wash Buffer and indicate addition on the bottle.
- For EB-PPK-200 Kits add 100mL of 100% Ethanol to each DNA Wash Buffer and indicate addition on the bottle.

**Procedure Options:**

Centrifugation Protocol – Listed below and in Lab Manual available online at [empiricalbioscience.com](http://empiricalbioscience.com)

Vacuum Protocol – Listed in the Lab Manual available online at [empiricalbioscience.com](http://empiricalbioscience.com)

**\*This product is intended for Research Use Only. This product is manufactured under ISO13485:2016 Quality System Requirements and is available for use as a Raw Material for use in IVD applications. Please contact Empirical Bioscience for further details.**

For MSDS and Certificate of Analysis please visit [www.empiricalbioscience.com](http://www.empiricalbioscience.com)

**Centrifugation Protocol**

- 1. Perform agarose gel/ethidium bromide electrophoresis to analyze PCR product.
- 2. Determine the volume of your PCR reaction.
- 3. Transfer the sample into a clean 1.5mL microcentrifuge tube (not provided).
- 4. Add 4-5 volumes CP Buffer. For PCR products smaller than 200 bp, add 5 volumes CP Buffer and 0.4 volumes 100% isopropanol. **Note:** Volume refers to the size of your PCR reaction. For example, if your PCR reaction is 100 $\mu$ L and is smaller than 200 bp, you would use 500 $\mu$ L CP Buffer and 40 $\mu$ L isopropanol.
- 5. Vortex to mix thoroughly. Briefly centrifuge to collect any drops from the inside of the lid.
- 6. Insert a High-Bind DNA Mini Column into a 2mL Collection Tube (provided).
- 7. Add the sample from Step 5 to the High-Bind DNA Mini Column.
- 8. Centrifuge at maximum speed ( $\geq 13,000 \times g$ ) for 1 minute at room temperature.
- 9. Discard the filtrate and reuse collection tube.
- 10. Add 700 $\mu$ L DNA Wash Buffer. **Note:** DNA Wash Buffer must be diluted with 100% ethanol before use. Please see above preparation section for instructions.
- 11. Centrifuge at maximum speed for 1 minute.
- 12. Discard the filtrate and reuse collection tube.
- 13. Repeat Steps 10-12 for a second DNA Wash Buffer wash step.
- 14. Centrifuge the empty High-Bind DNA Mini Column at maximum speed for 2 minutes to dry the column. **Note:** This step is critical for removal of trace ethanol that may interfere with downstream applications.
- 15. Transfer the High-Bind DNA Mini Column into a clean 1.5mL microcentrifuge tube (not provided).
- 16. Add 30-50 $\mu$ L Elution Buffer, TE Buffer, or sterile deionized water directly to the center of column matrix.
- 17. Let sit at room temperature for 2 minutes.
- 18. Centrifuge at maximum speed for 1 minute. **Note:** This represents approximately 80-90% of bound DNA. An optional second elution will yield any residual DNA, though at a lower concentration
- 19. Store DNA at -20°C.

\*This product is intended for Research Use Only. This product is manufactured under ISO13485:2016 Quality System Requirements and is available for use as a Raw Material for use in IVD applications. Please contact Empirical Bioscience for further details.

For MSDS and Certificate of Analysis please visit [www.empiricalbioscience.com](http://www.empiricalbioscience.com)