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## Certificate of Testing

### Anthrax Protective Antigen (PA) from *Bacillus anthracis*

Prod. No: 171E Lot Number: 17121A2

Date of Manufacture 25 August 2022 **FOR RESEARCH PURPOSES ONLY.  
NOT FOR HUMAN USE.**

#### Contents

Each container holds 0.5 mg of lyophilized Anthrax Protective Antigen (PA) in 5 mM HEPES, 0.05 M NaCl, pH 7.5 when reconstituted with 0.5 mL water. **Handle the product gently; do not vortex.**

#### Storage/Shipping Requirements

Store at  $5 \pm 3$  °C. This product is provided as an aseptically packaged lyophilized powder, sealed under vacuum. Ship material at ambient temperature.

#### Handling

Good laboratory technique should be employed in the safe handling of this product. Wear appropriate laboratory attire including a lab coat, gloves and safety glasses.

The product is intended for research purposes by qualified personnel. It is not intended for use in humans or as a diagnostic agent. List Biological Laboratories, Inc. is not liable for any damages resulting from the misuse or handling of this product.

Attribute	Test Method ID/Version	Results
Appearance	Physical Appearance / ASSAY.063 v05	Before reconstitution: uniform white pellet. After reconstitution: clear, colorless, and particulate free.
Purity	SDS-PAGE / GELS.018 v18	%purity = 97%
	OD Measurement / ASSAY.060 v07	$A_{280}/A_{260} = 2.00$ $A_{320} = 0.01$
Potency	Endotoxin / ASSAY.092 v06	0.068 EU/mg
Activity	Cytotoxic Activity; PA alone on J774A.1 cell culture / ASSAY.062 v03	No cell death at highest concentration of PA tested at 1,088,613 pM
	Cytotoxic Activity; PA with 1µg/mL of Anthrax Lethal Factor on J774A.1 cell culture / ASSAY.062 v03	Cytotoxicity $EC_{50} = 3.57$ ng/mL

Quality Control:  Date: 12/19/2022

Production:  Date: 12/19/2022