



# Aeroneb<sup>®</sup> Lab

Micropump Nebulizer

## Efficient

Produces a high-quality respirable aerosol with extremely low residual volume.

## Flexible

Aerosolizes a broad range of liquid formulations without altering molecular integrity. Two particle size options maximize utility across a range of test species.

## Proven

Utilizes commercially-produced OnQ<sup>™</sup> technology, providing a bridge from pre-clinical to clinical studies.



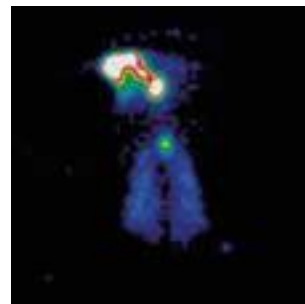
**Introducing the Aeroneb<sup>®</sup> Lab Micropump Nebulizer,** a high-efficiency aerosolization technology for use in pre-clinical aerosol research and inhalation studies, providing a valuable link between preclinical and clinical product development.

Using Aerogen's OnQ<sup>™</sup> technology, the Aeroneb Lab is designed to produce a highly respirable aerosol of virtually any drug in liquid, without altering or damaging the compound's molecular integrity or concentration. Published studies have demonstrated successful aerosolization of a variety of drugs in solution or suspension, including a gene therapy vector<sup>1</sup> (rAAV) and a recombinant fusion protein<sup>2</sup> (Epo-Fc).

Utilizing the same OnQ technology used in two commercially available nebulizer products, the Aeroneb Lab produces a fine droplet, low-velocity aerosol without compressed air, and integrates easily into existing exposure and aerosol testing equipment.

<sup>1</sup>Wilson L, Simmons R, Uster P. Aerosol Characteristics of Adeno-Associated Viral Vectors Produced by an Electronic Micropump Inhaler. CFF 2003. <sup>2</sup>Clark D, Pickford M, Evans S, Bitoni A, Bauer A, Newman S. Targeting an Inhaled Erythropoietin-Fc Fusion Protein (Epo-Fc) to the Human Large Central Airways. ISAM 2003.

## Aeroneb Lab Efficiency



Representative lung scintigraphy after aerosolization of 30  $\mu$ L containing 2mCi of <sup>99m</sup>Tc-DTPA with the Aeroneb Lab in a pre-clinical infant model of mechanical ventilation with a 2 kg macaque. (Mean deposition  $12.3 \pm 4.1\%$ , n=4)



# Aeroneb<sup>®</sup> Lab

Micropump Nebulizer

## Efficient

- High quality aerosol (precise particle size with low GSD)
- Low residual volume minimizes drug waste (<0.2 mL)
- OnQ does not alter formulation's molecular integrity

## Flexible

- Aerosolizes a broad range of formulations in liquid without increasing concentration
- Particle size nebulizer options maximize utility across a range of species and test conditions
- Provides a bridge from pre-clinical to clinical studies

## Proven

- Utilizes the same OnQ technology used in proven commercial and research nebulizer products
- Published studies confirm utility



## OnQ<sup>™</sup> Aerosol Generator

Efficient. Precise. Versatile.

- Creates a fine particle, low-velocity aerosol
- Precisely-defined particle sizes
- Aerosolizes a broad range of liquid formulations

## PRODUCT SPECIFICATIONS

### Physical

Nebulizer Unit dimensions: 45 mm H x 50 mm W x 50 mm D (1.77 in. H x 1.97 in. W x 1.97 in. D) Control Module dimensions: 33 mm H x 75 mm W x 131 mm D (1.3 in. H x 2.9 in. W x 5.2 in. D) Control Module cable: 1.8 m (5.9 ft.) long Nebulizer Unit weight: 25 g (0.88 oz.) nebulizer unit and filler cap Control Module weight: 178 g (6.3 oz.), including cable Nebulizer Unit capacity: maximum 10 mL Nebulizer and components are latex free

### Performance

#### Standard Volume Median Diameter (VMD) Nebulizer Unit

Flow rate: >0.2 mL/min  
Particle size: VMD between 4.0 µm and 6.0 µm  
Residual volume: <0.2 mL

#### Small Volume Median Diameter (VMD) Nebulizer Unit

Flow rate: >0.1 mL/min  
Particle size: VMD between 2.5 µm and 4.0 µm  
Residual volume: <0.2 mL

### Power

Power source: can operate from AC/DC adapter (input 100 to 240VAC 50 – 60Hz, output 9V) OR an external 9V DC power supply Power consumption: ≤2.57 Watts

## NEBULIZER UNIT OPTIONS



## ORDER INFORMATION

<b>Aeroneb Lab Control Module with AC/DC Adapter</b>	AG-AL7000
<b>Aeroneb Lab Nebulizer Unit, Standard VMD</b>	AG-AL1000
<b>Aeroneb Lab Nebulizer Unit, Small VMD</b>	AG-AL1100

To order, contact Aerogen: (US) 866-423-7643, (INT'L) +353-91-502714  
Accessories and replacement parts available

