



Your Breath: Your Health

PBM-Hale™

**A non-invasive deep lung breath
sample collection device**



**Separates saliva from
the exhaled breath,
providing a sample **free**
from contamination**

**Enables collection of
diagnostically relevant
clinical and research
breath samples**

Supports **personalised
healthcare through
precision diagnostics
and tailored treatment
decisions**

ENABLE ACTIONABLE LUNG DIAGNOSTICS, ANYWHERE



THE PROBLEM

Invasive, inaccurate or contaminated respiratory sampling limits effective diagnosis or monitoring.



THE SOLUTION

PBM-Hale™ collects uncontaminated deep lung breath safely, non-invasively, through breathing.



KEY ADVANTAGES

- True access to the lower airways
- Simple, scalable, accessible
- Enables diagnostics and discovery

No saliva contamination

PBM-Hale™ separates saliva-containing large droplets arising from the mouth, from the fine aerosols produced in distal airways and alveoli. This means a clean saliva-free sample.

No environmental contamination

Self-lock/unlock in the collection vial lid allows it to enter and exit the assembly in a sealed configuration. This prevents both contamination and sample loss making the sample suitable for a range of analytical procedures.

Equipped with a one-way valve

Ensures one-way flow throughout the entire breathing cycle preventing any re-inhalation.

Workflow compatible

Standard collection vials fit seamlessly into existing lab equipment and processes.



Reliable and versatile

Reproducible samples suitable for molecular, microbiological and biomarker analyses.

Fast collection

Generates samples within minutes, supporting point-of-care and clinical trial workflows.

Scalable solution

Adaptable for clinical use and research, from small cohorts to global trials.

For research use: A coolant chamber may be used in conjunction with PBM-Hale™ to increase sample yield.



Explore our team and PBM-Hale™ further at

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