

Healthcare • Hospitality • Commercial • Government • Manufacturing



Legionella Testing Services

Faster. More Accurate. More Comprehensive.



Potable Water | Utility Water



Phigenics
Validation Test®

Phigenics *Legionella* Testing Services for Validation of Water Management Programs



Phigenics Analytical Services Laboratory (PASL) provides comprehensive *Legionella* testing for all water systems found in commercial, institutional, and industrial facilities. PASL delivers the fastest and most accurate *Legionella* testing results by applying the Phigenics patented **PVT TimeZero™** test method for quantitative measurement of viable *Legionella* and Total Heterotrophic Aerobic Bacteria (THAB) as well as the **PVT Next Day LegiPlex™ PCR** which delivers rapid results that confirm the serogroup of *Legionella* within building water systems.

Benefits

Compared to other methods, the Phigenics Validation Test® (PVT) using TimeZero™ method is:

Faster because culturing occurs at “time zero” (t = 0) and results are typically communicated 4 days after sampling in the field.

More Accurate because variations due to changes in water samples during shipment are entirely eliminated.

More Comprehensive because *Legionella* bacteria and Total Heterotrophic Aerobic Bacteria (THAB) are obtained from the same sample with one protocol.

Compared to other methods, the PVT Next Day LegiPlex™ PCR is:

Faster because molecular results of the type of *Legionella* present in a water sample are available the next day after receipt to lab.

More Accurate because PVT Next Day LegiPlex™ PCR, when used as a negative screen, has a >99% negative predictive value.

More Comprehensive because of increased molecular identification of *Legionella pneumophila* sg 1, *Legionella pneumophila* sg 2-15, and *Legionella* genus.

PVT Next Day LegiPlex™ PCR



Delivers rapid results by providing the serogroup of *Legionella* present in a water sample the day after sampling. LegiPlex™ is a simultaneous multi-reaction (multiplex) real-time PCR for the detection of *Legionella pneumophila* sg 1, *Legionella pneumophila* sg 2-15, and *Legionella* genus. This industry-leading assay meets the methodological, performance, and quality control requirements outlined by the International Standards Organization (ISO), achieving ISO 12869:2019 compliance for a limit of detection and specificity. **PVT Next Day LegiPlex™ PCR** provides building owners with critical data about the safety of their water systems, allowing them to make defensible decisions.

Thorough Analytical Reporting, Digital Imaging, and a Chain of Custody



Digital Image Record

- Results at next day, 4 days, and 11 days
- Microbial growth
- ID labels to establish a chain of custody

Run Number	Run Name	Method	Culture	THAB	Next Day	Standard
20170101	20170101	2-Block	Block #1 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #2 Cold	ND	ND	ND
20170101	20170101	2-Block	Block #3 Cold	ND	ND	ND
20170101	20170101	2-Block	Block #4 Cold	ND	ND	ND
20170101	20170101	2-Block	Block #5 Cold	ND	ND	ND
20170101	20170101	2-Block	Block #6 Cold	ND	ND	ND
20170101	20170101	2-Block	Block #7 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #8 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #9 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #10 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #11 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #12 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #13 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #14 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #15 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #16 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #17 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #18 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #19 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #20 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #21 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #22 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #23 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #24 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #25 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #26 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #27 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #28 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #29 Hot	ND	ND	ND
20170101	20170101	2-Block	Block #30 Hot	ND	ND	ND

Comprehensive summary for all samples submitted in one easy-to-read table

Phigenics Legionella Tests with TimeZero™ and NextDay LegiPlex™ PCR



PVT PREMIUM includes TimeZero™ test method for Legionella species and THAB, Next Day LegiPlex™ PCR, and the Standard Legionella 11731 ISO spread plate culture method.



PVT SELECT includes TimeZero™ test method for Legionella species and THAB and Next Day LegiPlex™ PCR.

Phigenics *Legionella* Testing Services

Faster. More Accurate. More Comprehensive.

Phigenics Validation Tests

Attribute	 PVT PREMIUM Phigenics Validation Test®	 PVT SELECT Phigenics Validation Test®	 PVT TimeZero™ with Standard ISO Phigenics Validation Test®	 PVT TimeZero™ Phigenics Validation Test®	 PVT Next Day LegiPlex™ PCR Phigenics Validation Test®	 PVT Standard ISO Phigenics Validation Test®	 PVT THAB Phigenics Validation Test®
Product Number	MB-210	MB-600	MB-300	MB-100	MB-1410	MB-1010	MB-400
Culture inoculated at TimeZero™ (t=0)	✓	✓	✓	✓	⊘	⊘	✓
Utilizes PVT Next Day LegiPlex™ PCR	✓	✓	⊘	⊘	✓	⊘	⊘
Time Required to Receive Reports*	Next Day / 4 Days / 11 Days	Next Day / 4 Days	4 Days / 11 Days	4 Days	Next Day	11 Days	4 Days
Limit of Detection (CFU/mL)	1**	10	1**	10	~1	1**	100
Differentiates <i>L. pneumophila</i> SG 1, <i>Lp</i> SG 2-14, and <i>Legionella</i> Species	✓	✓	✓	✓	⊘	✓	⊘
Reports Next Day Molecular Marker Negative Screen	✓	✓	⊘	⊘	✓	⊘	⊘
Measures Total Heterotrophic Aerobic Bacteria (THAB)	✓	✓	✓	✓	⊘	⊘	✓
Conforms to ISO 11731 Spread Plate Culture Method	✓	⊘	✓	⊘	⊘	✓	⊘

*From sample in the field

**The practical limit of quantification according to the results published by the CDC is about 10 CFU/mL



Phigenics Laboratory Certifications

Phigenics Analytical Services Laboratory (PASL) is certified as proficient in the Environmental *Legionella* Isolation Techniques Evaluation (ELITE) program administered by the Centers for Disease Control and Prevention (CDC) for using the Phigenics Patented TimeZero™ test method and the ISO 11731 spread plate method. PASL has passed every proficiency test since the beginning of the CDC ELITE program. PASL is a New York State ELAP-certified laboratory for the analysis of potable and non-potable water and provides a wide range of other testing services for microbial hazards such as *Pseudomonas*, *Stenotrophomonas*, *Acinetobacter*, *Mycobacterium*, *Aspergillus*, and *Fusarium*. PASL also provides complete testing services required by the Safe Drinking Water Act.

Phigenics Analytical Services Laboratory

Call us today at 844.850.4087 or go to www.phigenics.com/testing

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