

BIOTICA

FAST DETECTION FOR LIFE

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FAST DETECTION FOR LIFE

BIOTICA

- Born in 2005, focuses its activity on the investigation, development and further commercialisation of a fast detection system of pathogenic microorganisms.
- With the compromise of a sociably responsible microbiology, Biotica's main aim has been to investigate the rapid detection of bacterias. Firstly to be able to avoid their effects on people health and their environment.

Kit Bioalarm *Legionella pneumophila*

*Fast and easy Legionella pneumophila
detection*

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ADVANTAGES OF THE KIT BIOALARM LEGIONELLA

1 Advantage

- ◆ Allow to make **Legionella pneumophila** detection in water, without the expensive investments in equipments required by another's techniques as polymerase chain reaction (PCR).

ADVANTAGES OF THE KIT BIOALARM LEGIONELLA

2 Advantage

- ◆ The Kit Bioalarm Legionella has not the frequent false positive of another's techniques like PCR.

ADVANTAGES OF THE KIT BIOALARM LEGIONELLA

3 Advantage

- The cost of each analysis is much minor than the cost of PCR techniques and similar to the cost of traditional analysis.

KIT BIOALARM

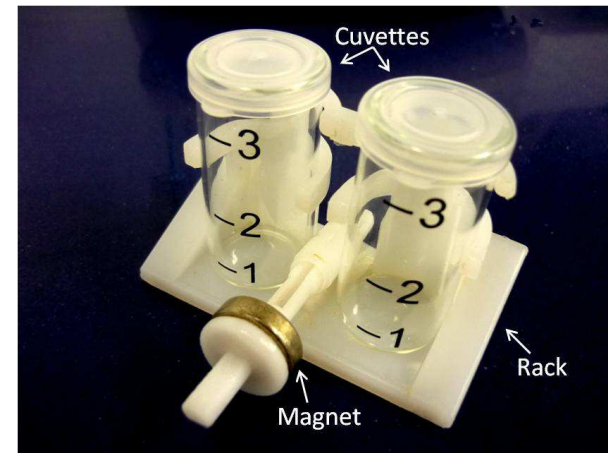
Legionella pneumophila

Advantages

PARAMETERS	PLATE CULTURE	MOLECULAR TECHNIQUES (PCR)	KIT BIOALARM LEGIONELLA
TIME	10-15 DAYS	3-6 HOURS	50 MINUTES
USER QUALIFICATION	MEDIUM	HIGH	LOW
COST	MEDIUM	HIGH	MEDIUM
SPECIFICITY	MEDIUM	HIGH	HIGH
UTILITY	VERIFICATION	VERIFICATION	PREVENTION, OUTBREAK AND EMERGENCY
SPECIFIC INSTRUMENT	NO	YES	NO
TRAINING	MEDIUM	HIGH	LOW

KIT BIOALARM *Legionella pneumophila*

- **Fast**
- **Reliable**
- **Easy to use**
- **Preventive**
- **Semi-Quantitative analysis**
- **Validated**



VALIDATION

- The Kit Bioalarm Legionella has been validated by national and international well-known and prestige laboratories.

(Labaqua, Iproma)

MAXIMUM TECHNICAL RELIABILITY

<i>Validation Study</i>	Made by 2 laboratories of renowned national and international levels LABAQUA IPROMA
<i>Intercolaborative Study</i>	Made by 12 of the most important laboratories, publics and privates of our country.
<i>Accreditation</i>	The Kit Bioalarm Legionella has been evaluated by ENAC, allowing its accreditation.
<i>Report of SEM</i>	The Microbiology Spanish Society has evaluated the Kit, and its reports are a positive evaluation.

KIT BIOALARM

Legionella pneumophila

Validation

BIOALARM <i>Legionella</i>	
Detected bacteria	Legionella pneumophila
Concentration method	Membrane filtration
Detection method	Immunomagnetic capture and enzyme-immune test
Specificity	93%
Sensitivity	100%
False positives	2.7%
False negatives	0%
Selectivity	-0.008%
Efficiency	98%
Comparative culture	DL drinkable water.....270 cfu/L
	DL cooling towers.....280 cfu/L
Sample volume	9.0 mL
Analysis time	50 min

Kit Bioalarm *Legionella pneumophila*

Technical Fundamentals

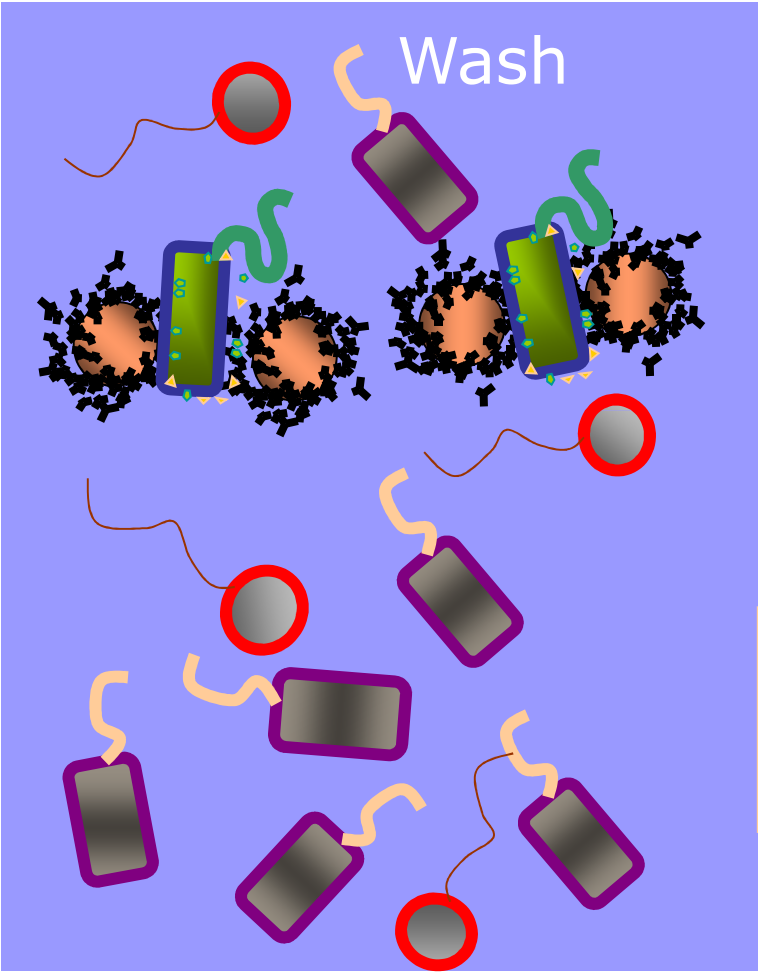
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INMUNOMAGNETIC ANALISYS

Sample



Particules



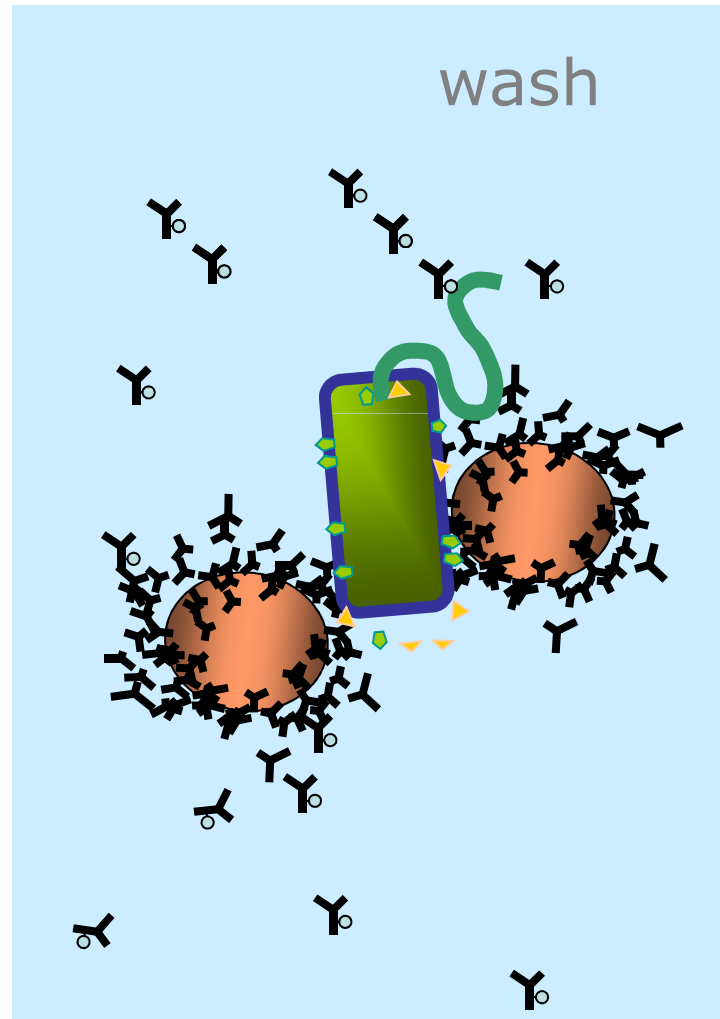
magnet

ANÁLISIS INMUNOMAGNÉTICO

Antibody



Substrats



Kit Bioalarm

Legionella pneumophila

PROCEDURE DESCRIPTION

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KIT BIOALARM

Legionella pneumophila

Analysis

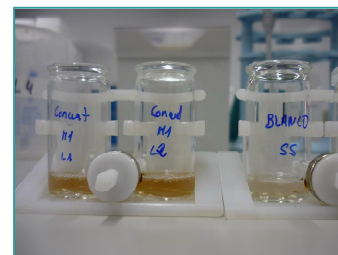
Filtration



Immunomagnetic analysis (kit)



Result



Analysis using the Kit Bioalarm Legionella

Prepare materials

Take the reagents that will be used out of the case. Let temper. Remove the magnet from the cuvette and add reagent L2 to line 1. Cover and shake vigorously. Discard the contents.

Shake the L1 until a completely homogeneous suspension is got.

A) CAPTURE

1. Shake and add the reactive L1 up to line 1.
2. Add the sample up to line 3.
3. Shake gently, with the lid on, once every 3 minutes, for 15 minutes.



4. Put the magnet as close as you can and wait 5 minutes to retain the immunomagnetic particles.
5. Empty the cuvette carefully, making sure you don't take the retained particles as well.



6. Separate the magnet from the cuvette and add the reactive L2 up to line 2.
7. Shake gently WITHOUT lids until the particles suspend again..



8. Put the magnet as close as you can and wait three minutes to retain the immunomagnetic particles.
9. Empty, being careful not to take any retained particles away.



B) MARKING PROCESS

1. Remove the magnet, add all the content of one of the L3 vials and shake.
2. Wait 10 minutes, shake gently WITHOUT lids, every 3 minutes.



3. Put the magnet as close as you can and wait 3 minutes to retain the immunomagnetic particles.
4. Empty, being careful not to take any retained particles away.



5. Separate the magnet from the cuvette and add the reactive L2 up to line 2.
6. Shake gently WITHOUT lids until the particles suspend again.



7. Put the magnet as close as you can and wait 3 minutes to retain the immunomagnetic particles.



8. Repeat steps 4, 5, 6 y 7 two more times.

C) DETECTION

1. Add L5 to a vial of L4 to the line. Shake vigorously.
2. Empty the cuvette, paying attention not to drag the captured particles.
3. Separate the magnet from the cuvette and add all the contents of the dissolved mixture.



4. Shake gently WITHOUT lids, until the particles are resuspended; wait 2 minutes shaking it gently meanwhile.
5. Add 3 drops of L6 and WITHOUT lids shake gently. Wait 1 minute.



KIT BIOALARM

Legionella pneumophila

Interpretation

