Arcis Pathogen 500 Kit

UFL010 Arcis High Throughput Pathogen Kit 500 reactions CE IVD

Instructions for use

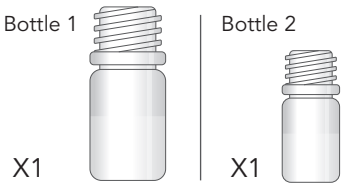
1. General Information

The Arcis Pathogen 500 Kit is a ready to use, validated kit containing two reagents which enable nucleic acid extraction from bacteria grown on common microbial growth substrates. In 3 minutes the Arcis Pathogen 500 Kit can allow you to go from bacterial samples to downstream nucleic acid investigations such as qPCR without the need for further isolation or purification. As this product does not require heating or centrifugation it is ideal for automation or use in low technology environments. Samples do not need to be pre-incubated with Proteinase K before use in the Arcis Pathogen 500 Kit. The product is intended to be used by trained users proficient in molecular biological techniques and is intended for in-vitro diagnostic use.

2. Materials Provided

Material Provided	Quantity	Number of Preps
Reagent 1	1 Bottle	500*
Reagent 2	1 Bottle	

* 500 reactions based on standard protocol volumes.



3. Storage Conditions

Recommended storage conditions before use: 4°C to 40°C. If the reagents are required to be used over an extended period of time (1 week) after initial opening they can be pre-aliquoted and then stored, sealed for later use. Vials should be capped when not in use.

4. Samples

The Arcis Pathogen 500 Kit is a sample prep system that has been validated as an in-vitro diagnostic kit for the extraction of bacterial DNA from bacteria grown on common microbial growth substrates. The material released is suitable for use in molecular diagnostic investigations using techniques such as qPCR. The product should only be used by professional operators trained in the appropriate in-vitro procedures. The product has been tested on the following sample types: bacterial cells on agar, liquid broth and standard laboratory buffers such as PBS. Gram positive and Gram negative bacteria have been used in validation studies including E. coli, S. aureus and K. pneumoniae. The Arcis Pathogen 500 Kit can be used on a research only basis for the release of other pathogen nucleic acids (e.g. RNA from viruses) and other sample types (e.g. blood). For details on suggested optimized protocols for different samples types such as tissue, buccal swab, blood, saliva etc. please see our website **www.arcisbio.com**

The Arcis Pathogen 500 Kit does not require samples to be pre-incubated with Proteinase K or heating before extraction. It is recommended that solid samples such as tissue or plant material should be homogenized directly in Arcis Reagent 1. Swabs should be placed directly in Arcis Reagent 1 rather than into transport reagent.

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Instructions for Use continued

5. Applications

The nucleic acids released by the Kit have been successfully used directly in molecular biology techniques including qPCR and Isothermal Amplification without the need for further clean-up or purification steps. The Kit is particularly suited to high-throughput automated workflows and use with liquid handling robots. The Arcis Pathogen 500 Kit can also be used to stabilize nucleic acids at room temperature before later testing.

6. Standard Protocol

If samples are frozen ensure that they have thawed completely before starting this procedure.

6.1. Add 90µl of sample to 150µl of Reagent 1 (or scale up for larger sample volume). Mix thoroughly using a pipette, robot or by vortex mixing.

6.2. Incubate for one minute at room temperature. At this point DNA is stabilized for 90 days and RNA is stabilized for up to 7 days at room temperature, provided there is no further processing.

6.3. Take 5µl of the above lysed mixture and combine with 20µl of Reagent 2 (or scale up for larger sample volumes maintaining the 1:4 ratio). Once processed with Reagent 2, samples should be used within 4 hours or frozen at -20˚C.

6.4. Add appropriate volume into PCR master mix (e.g. 5µl per 25µl reaction) or continue directly to other downstream technique.

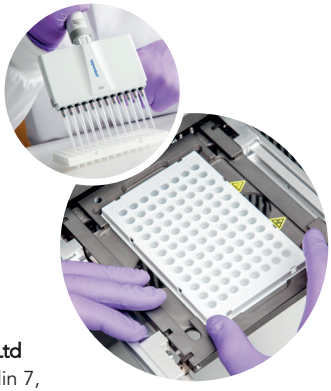
7. Protocol for Dilute Samples

7.1 When handling very dilute samples the ratio of sample to Arcis Reagent 1 can be increased to 1:1 to avoid further dilution (90µl of sample to 90µl of Reagent 1)

7.2 Samples that have been processed as in step 7.1 can be added to Reagent 2 at 1:3, 1:2 or 1:1 ratio to reduce sample dilution. (See Table 1)

Table 2: Reaction mixture Reagent 2

Extract from lysis reaction (µl)	Reagent 2 Volume (µl)	Ratio
5	15	1:3
10	20	1:2
20	20	1:1



8. Manufacturer Contact Details

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