

Arcis Sample Prep Kit

(Bulk Kit)

UFL002 Arcis Sample Prep Kit 50 reactions



Instructions for use

1. General Information

The Arcis Sample Prep Kit is a ready to use kit containing two reagents which enable nucleic acid extraction from a variety of biological sample types including whole blood, tissue, saliva, bacteria or plant cells.

In 3 minutes the Arcis Sample Prep Kit can allow you to go from sample 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 use in low technology environments.

The product is intended to be used by trained users proficient in molecular biological techniques.

2. Materials Provided

Material Provided	Quantity	Number of Preps
Reagent 1	1 bottle	50*
Reagent 2	1 bottle	

* 50 reactions based on standard protocol volumes.

3. Storage Conditions

Recommended storage conditions before use:
4°C to 40°C

Vials should be capped when not in use.

4. Samples

The Arcis Sample Prep Kit can be used to extract total nucleic acids (DNA and RNA) from biological samples, without the need for dedicated kits for different sample types. These sample types include:

- Mammalian Samples: including whole blood, (fresh/frozen, with and without heparin or EDTA), hair follicle, tissue, urine, stool and buccal swabs
- Microbiological samples: including bacteria (*E. coli*, *S. aureus*, *P. aeruginosa*, *K. pneumoniae*), viruses (HBV/HCV) and parasites (plasmodium)

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 Sample Prep Kit does not require samples to be pre-incubated with Proteinase K 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.

Instructions for Use continued

5. Applications

The nucleic acids released by the kit have been successfully used directly in molecular biology techniques including PCR, Next Generation Sequencing and Isothermal Amplification without the need for further clean-up or purification steps.

The Arcis Sample Prep kit can also be used to stabilize nucleic acids at room temperature before later testing. The Arcis Sample Prep Kit is particularly suited to point of care and field based testing, forensic samples, plant samples, veterinary research and genomic analysis.

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 or by vortex mixing.
- 6.2. Incubate for one minute at room temperature. At this point DNA is stabilised for 90 days and RNA is stabilised 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 such as saliva 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 6.1 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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