

ZiXpress® HPV DNA Extraction Kit

【Cat. No. and Packaging Specifications】

RUO

ZP02206-096 - Pre-filled Reagents for 96 Tests/Box (8 Tests/Plate × 12 Plates)

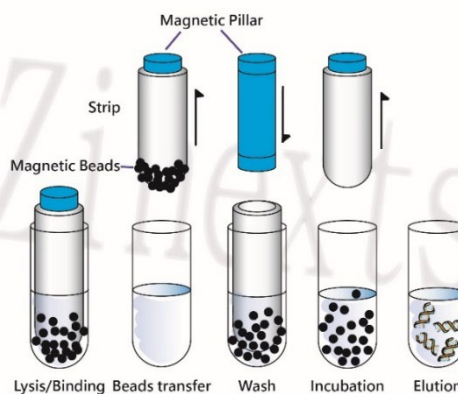
ZP02206-192 - Pre-filled Reagents for 192 Tests/Box (16 Tests/Plate × 12 Plates)

ZP02206-960 - Non Pre-filled Reagents for 960 Tests/Box (16 Tests/Plate × 60 Plates)

【Introduction - ZiXpress® Magnetic Pillar Technology】

Zinexts Life Science is specialized in developing advanced, efficient, and reliable technologies in nucleic acid purification, enabling successful delivery of extraction results from various sample types. The ZiXpress® Nucleic Acid Purification Platform utilizes permanent magnet rods to collect magnetic beads from the solution for the purpose to release the beads into wells containing reagent for the next step of extraction.

The purification process contains four basic steps: sample lysis, nucleic acid binding, washing, and elution. The effectiveness in the beads collection and the transfer of beads ensures superior washing and elution efficiency.



Product Name	ZiXpress® HPV DNA Extraction Kit
Catalogue Number	ZP02206-096, ZP02206-192, ZP02206-960
Applicable Instrument Model	ZiXpress® 32 & ZiXpress® 64 (First & Second generation) Instrument
Displayed Protocol Name on The Instrument	Create new protocol for HPV
Processing Time	ZiXpress® 32 series: 35 minutes ZiXpress® 64 series: 35 minutes

【Intended Use】

The product purpose is to extract and purify DNA from Human Papillomavirus (HPV) from cervical cell samples which are collected by cervical brush or genital swab in liquid-based medium* (e.g., Hologic Thinprep PreservCyt®, BD Surepath™, etc.) or other STM (sample transport media) preservation solutions (e.g., QIAGEN DNA PAP Cervical sampler, Roche Cobas® PCR Cell Collection Media, HybriBio cell preservation solution, etc.). The nucleic acids purified by ZiXpress® system are suitable for a variety of molecular diagnostic assays which are essential and broadly used in many downstream applications such as infectious agent detection, genetic screening, sequencing, food safety, forensic, etc.

For research use only. Not for use in diagnostic procedures.

【Kit Content】

Catalog Number: ZP02206-096, ZP02206-192

	ZP02206-096	ZP02206-192
Components	Quantity	
Reagent 96 Plate (Pre-filled)	(8 x 12) 96	(16 x 12) 192
8-Tip Comb	(8 x 12) 96	(16 x 12) 192
BL4 Buffer	25 ml x 1	25 ml x 2
Proteinase K (10 mg/ml)	1.5 ml x 1	1.5 ml x 2

Catalog Number: ZP02206-960

Components	Quantity
2.2 ml Deepwell 96 plate (Non Pre-filled)	(16 x 12 x 5) 960
8-Tip Comb	(16 x 12 x 5) 960
Proteinase K (10 mg/ml)	20 ml x 1
Magnetic Beads B	40 ml x 1
Lysis Buffer 10	400 ml x 1
Wash Buffer W5	900 ml x 1
Wash Buffer 2A	900 ml x 1
Wash Buffer 2A	900 ml x 1
Elution Buffer	150 ml x 1
BL4 Buffer	300 ml x 1

【Reagent Plate Content】

Well No.	Components	Volume
1/7	Lysis Buffer 10	650 μl
2/8	Wash Buffer W5	800 μl
3/9	Wash Buffer 2A	900 μl
3/9	Magnetic bead	40 μl
4/10	Wash Buffer 2A	900 μl
5/11	-	-
6/12	Elution Buffer	150 μl

【Storage & Stability】

Reagent plate and consumables should be stored at room temperature. **Do not** freeze the reagent plate. Proteinase K is suggested to be stored at 2-8°C. Zinexts Life Science guarantees that all components are stable for 18 months when stored properly.

【Sample Requirements】

- a. Sample type: cervical cell samples that are collected by cervical brush or genital swab in liquid-based medium
- b. Sample storage: The specimen should be sent for examination at 4-30°C immediately after collection. The storage condition is dependent on the preservation solution
- c. Sample volume: 200 μl

【Elution Requirements】

- a. Elution volume: 150 μl
- b. Store the purified nucleic acid at 4°C (short-term, less than 10 days) or aliquot and store at -70°C (long-term) before performing the downstream analysis.

【Operation Protocol】

1. Sample Preparation

- a. The table below describes the recommendations in virus collection from different kinds of sample type:

Sample type	Procedure
<p>In liquid-based preservation solution</p> <p>(eg. Hologic Thinprep PreservCyt®, BD Surepath™)</p>	<p>METHOD 1</p> <ol style="list-style-type: none"> 1. Take the sample amount as the following assay recommended* 2. Add 200-300 µl sample and 15 µl proteinase K to well #1 or 7 for extraction <p>METHOD 2</p> <ol style="list-style-type: none"> 3. Centrifuge at 1000 x g. for 3mins 4. Discard supernatant 5. Resuspend pellet with 220 µl BL4 6. Vortex for 5 sec 7. Transfer 200 µl sample and 15 µl proteinase K to well #1 or 7 for extraction
<p>In other STM preservation solution</p> <p>(QIAGEN DNA PAP, HybriBio cell preservation solution)</p>	<p>METHOD 1</p> <ol style="list-style-type: none"> 1. Vortex sample for 5 sec 2. Transfer 200 µl sample and 15 µl proteinase K for extraction <p>METHOD 2</p> <ol style="list-style-type: none"> 1. Add 100 µl BL4 directly to 100 µl sample 2. Vortex for 5 sec 3. Transfer 200 µl sample and 15 µl proteinase K to well #1 or 7 for extraction

* Especially for those assays of "signal amplification", in that the target DNA won't be amplified.

Take adequate amount of sample is necessary

** The sticky mucus is common in cervical specimen, add BL4 before processing will help sample liquefying and nucleic acid extraction

2. Consumables Preparation

- a. Turn on the power switch and wait for the screen to show the Home Page.
- b. Set up the 8-Tip Combs on the 8-Tip Comb track, and make sure the 8-Tip Combs enter the track completely.

3. Reagent Plate Preparation

Catalogue Number: ZP02206-096, ZP02206-192

- a. Remove the aluminum foil sealing membrane on the reagent plate carefully and avoid liquid splashing. Add 200 µl samples to Well 1 or/and Well 7, which contains the pre-filled lysis buffer. Mix the sample with the lysis buffer 3-5 times by pipetting gently.
- b. Add 15 µl Proteinase K to Well 1 or/and Well 7 and mix 3 times by pipetting gently.

Catalogue Number: ZP02206-960

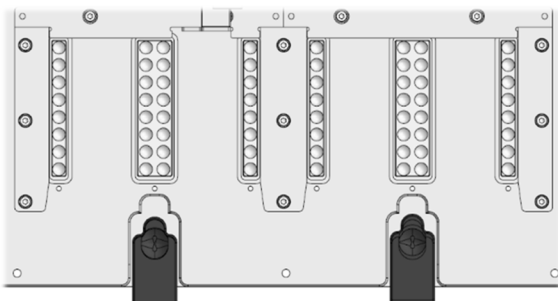
- a. Load the specified buffer into specified wells of the 96 Plate according to Reagent Plate Content listed above.
- b. Optional (Single Strip method): Put the Single Strip* on the Adapter* and use it as the reagent plate.
 - * Single Strip and Adapter are not included in the kit, and they can be purchased separately.
- c. Add 200 µl viral samples to Well 1 and Well 7, which contains the pre-filled lysis buffer. Mix the sample with lysis buffer 3-5 times by pipetting gently.
- d. Add 15 µl Proteinase K to Well 1 and Well 7 and mix 3 times by pipetting gently.

4. Automated Extraction Setup

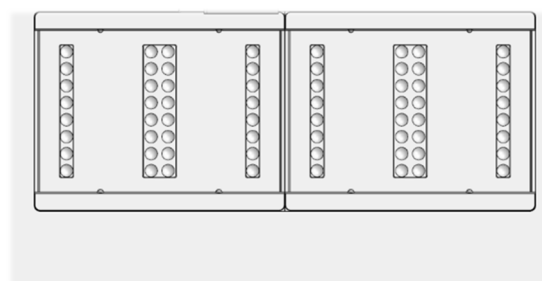
- a. (1) Put the reagent plate on the plate track and release heater locks. (For first generation)
 - (2) Insert the reagent plate into the plate track and ensure it fit well. (For second generation)

(Note: Please check the direction of “recognition corner” on the Reagent 96 plate, it must be on the left.)
 - (3) Optional - ZP02206-960 (Single Strip method): Please follow step (2) to insert the Adapter (Reagent Plate) into the plate track and ensure it fit well. (For second generation)

First generation:



Second generation:



- b. Close the instrument door.
- c. Protocol Selection: Select the appropriate protocol on the instrument or edit a new protocol on the blank space. (Page1 to Page 12).

HPV process as below: (Process time: 30 minutes)

Step No.	Well	Name	Standby (min)	Mix (min)	Volume (μl)	Mix Speed	Mag (sec)	Temp (°C)
1	3	Transfer	0	1	900	3	30	80
2	1	Lysis	0	15	800	3	30	80
3	2	WASH 1	0	1	900	3	30	-
4	3	WASH 2	0	1	900	3	30	-
5	4	WASH 3	0	1	900	3	30	80
6	5	DRY	2	0	900	3	30	80
7	6	ELUTE	2	3	150	3	60	80
8	4	WASTE	0	1	600	3	0	--

- d. Press “▶” to start the process.
- e. After the experiment program is finished, transfer the extracted products located at Well 6 and Well 12 into nuclease-free tubes. Store the purified nucleic acid at 4°C (short-term, less than 10 days) or aliquot and store at -70°C (long-term) before performing the downstream analysis.

【Precautions】

Please read the instructions before using the kit:

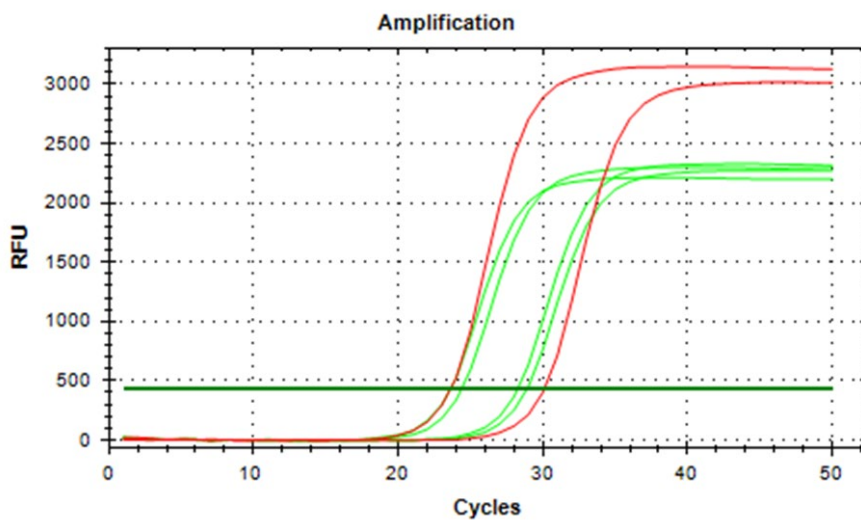
- a. When working with chemicals or clinical samples, always wear a suitable lab coat, disposable gloves, and protective goggles. All of the experiment supplies, such as pipettes, tubes, tips must be autoclaved. Operator should wear gloves and masks.
- b. Before usage, the ZiXpress® Nucleic Acid Purification Platform should be disinfected with the internal UV light program. We recommend cleaning the instrument with 75% ethanol and disinfecting it by performing the UV light program in the instrument.
- c. Proteinase K is suggested to be stored at 2-8°C.
- d. After the experiment, all samples and reagents must be properly disposed.
- e. Magnetic beads may occasionally appear in the elution buffer after extraction. If so, please carefully avoid the magnetic beads while transferring the extracted elution product.

Please report any serious incident occurred in relation to the device to your local representative/ agent or the manufacturer, and to the competent authority of your country/state.

【Starting Material】










Sample Type	Cervical cell samples that are collected by cervical brush or genital swab in liquid-based medium
Target Nucleic Acid	Viral DNA
Sample Volume	200 - 400 μ l * If the sample is less than 200 μ l, please add BL4 to fill up to 200 μ l.
Controls/Optional Internal Control#	Add controls/internal control in the extraction procedure if needed for the downstream analysis.
Elution Volume	150 μ l

【Expected Purity and Yield】



The performance of the ZiXpress HPV DNA extraction kit (green) was compared with the QIAGEN MinElute Virus Kit (red), using 200 μ l HPV swab samples in PreservCyt collection medium for extraction. The result showed similar performance of HPV extraction to market leading brand.

【Symbols】

Symbol	Explanation
	For research use only
	Catalogue number
	Lot/Batch number
	Sufficient for [n] samples
	Instructions for Use / Handbook
	Expiry date
	Storage temperature (15°C - 25°C)
	Manufacturer
	Caution

【Warranty】

Zinexts Life Science is committed to providing our customers with high-quality products and services. Our goal is to ensure that every customer is 100% satisfied with our products and services. If you have any questions or concerns about our products or services, contact our Technical Support Representatives.

Zinexts Life Science guarantees the performance of all products are according to specifications stated on our product literature. The purchasers/users must determine the suitability of the product for their particular use. We reserve the right to change, alter, or modify any product to enhance its performance and design.

This warranty limits Zinexts Life Science Corporation's liability only to the cost of the product. No warranty is granted for products beyond their listed expiration date. No warranty is applicable unless all product components are stored in accordance with instructions.

【Technical Support】

For technical assistance and further information, please visit our website www.zinexts.com, contact our Technical Support or your local distributor.

【Product List】

Catalog Number	Packaging Specification (Adapted System)
ZP02206-096-WH	Pre-filled Reagents for 96 Tests/Box (1st generation ZiXpress 32)
ZP02206-096-BL	Pre-filled Reagents for 96 Tests/Box (2nd generation ZiXpress 32/64)
ZP02206-192-WH	Pre-filled Reagents for 192 Tests/Box (1st generation ZiXpress 32)
ZP02206-192-BL	Pre-filled Reagents for 192 Tests/Box (2nd generation ZiXpress 32/64)
ZP02206-960-WH	Non Pre-filled Reagents for 960 Tests/Box (1st generation ZiXpress 32)
ZP02206-960-BL	Non Pre-filled Reagents for 960 Tests/Box (2nd generation ZiXpress 32/64)
ZP02206-960-B-BL	Non Pre-filled Reagents for 960 Tests/Box (Bottles only, without consumables, 2nd generation ZiXpress 32/64)
ZP02206-960-C-BL	Non Pre-filled Reagents for 960 Tests/Box [Bottles (No ethanol) only, without consumables and proteinase K, 2nd generation ZiXpress 32/64]

【Manufacturer Information】

Manufacturer: Zinexts Life Science Corp.
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Product of Origin: Taiwan (R.O.C.)

【Revision History】

Version	Date	Description
1.0	31. Oct. 2022	New edition



Version: 1.0
Rev. Date: 31.Oct.2022



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