



# Liquid Based Cytology Kit

## Collecting samples

A doctor or a mid-wife collect sample using cervix brush speculum in office.

Soon after collecting samples, they separate brush like section and put it in fixative solution. The sample is stable at least for 2 months inside preserver in the room temperature. To separate brush head and to avoid any infection put brush head in vial after sampling push colorful brush handle after layering brush adage internal vial wall in order to separate two posts.

1. Avoid sampling during menstruation.
2. Don't have sex at least 3 days before sampling.
3. Avoid sampling during 3 days after using anti sperm foams and jells, caring pomades and ...
4. Avoid transferring thrombus in to fixative solution in case you have to take sample in bleeding specimens.

## Technical features of LBC

- \*Volume: 15 cc
- \*Singel Step
- \*High Cell preservation
- \*2years expiration
- \*Without formaline(suitable for PCR)
- \*Flexible with manually, Thin prep and Eprep





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## History

In 1945 Gorge papanikolau founded natural pap smear test with publishing his article "diagnosing cervical cancer with augend smear".

Unless ceval cancer diagnosis improvement with this method, using and studying this method for about 40 years showesthat there are still able problems with early diagnosis cancer. Almost too percent of pap smear screenings in England and velse are based on LBC method.

Now, yakhteh Fanavar Company with the commercial name of viva cell has been successful to produce this product. Although, it is able to fulfill the country needs.

## Uses

The kit is used for women cytology screening cervical cancer. Obtain cell sediment can be used for genome diagnosis of factors the same as HSV, HPV, Chlamydia Neisseria and.... To this purpose extract DNA after washing cell sediment for 3 times with distilled water, then end up with PCR

## Contents of the kit

1. Cell preservative solution:

50 vial containing 15 ml sample

Preservation solution and lubricant RBC solution (using a special type of polymer, it might include particles)

2. 50 cervix brush for sampling.

3. Instruction of use.

## Kit storage and stability conditions

1. Keep contents of the kit in room temperature of 15\_30 °c

2. Keep the kit away from heating devices.

3. Don't keep contents of kit in exposed to direct sunlight or UV ray and keep them in their special box.

4. Contents of the kit are stabled till the end of writhen expiration date on it.

5. Do never keep in exposed to direct date.

6. The product has the ability of keeping different types of biopsies.

## Kit competitive advantages

1. Dislike other similes, this kit is mono solution. It doesn't need cleaner and layer. Its cell phase gets separated by centrifuging only for once.

2. The solution doesn't have formalin and said, so, molecular tests and DNA extract and HPV diagnosis from liquid is possible.

3. The solution is sterilized and it blocks microbe and genes growth in the case their entrance.

4. The solution has capability of being kept in room temperature.

5. The solution is able to be used for erect device

6. Having special formula, mucus and RBSS are completely lubricant.

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## Test procedures

- 1) Shake the vial fixative containing the sample for 3 seconds in shaker pipe and transfer the contents to falcon pipe.
- 2) Put the pipes in to centrifuge machine and and centrifuge them in ( $g1000$  ( $\_/+100$ )) 2800\_3200 rpm for 10 minutes
- 3) Soon after centrifuging is done, discharge the solutions on the surfaces of rhea pipes and clean edge of the pipe.
- 4) In order to prepare a monolayer and even smear, mix each sample in the pipe shaker at least for 15 seconds separately and then prepare the smear by sampler immediately.  
To prepare an adequate smear, discharge the solution obtained by sampler under a steady and continuous pressure circularly on the slide and put the slide on a flat surface.
- 5) Use a new slide for each 1-3 sample and record the samples numbers by a diamond per.
- 6) To dry out, put the prepared slide in room temperature for 2\_3 hours on 45 °c.
- 7) After the slides are dried out, color and montage them vial papanicolaou method.

## The kit stability test

Solutions of this kit are put in closed vial for 60 days, in laboratory temperature for 45 days and in refrigerator for 30 days. Them they were sampled and tested via epithelial cells used for quality control. The result showed that this kit is stable in room temperature at least for 2 years.

## Reference

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