

Silicon hydroxyl magnetic bead

B silicon hydroxyl magnetic beads are specially designed for nucleic acid extraction and purification. They can bind to nucleic acid in solution through hydrophobic, hydrogen bonding and electrostatic interaction under high salt and low pH conditions, and quickly separate nucleic acid from biological samples, with safe and simple operation.

The nucleic acid load, magnetic response and suspension of B silicon hydroxyl magnetic beads have reached the leading level in the industry. For the experimenters who use them for the first time, this tutorial is provided as a guide for operation.

Noun explanation:

Primary magnetic: magnetic nanomaterials with a solid content ratio greater than 70%, without any dilution.

Magnetic beads that are usually not directly involved in the extraction work.

Working magnetic: The primary magnetic diluted with water, washing liquid or cracking liquid can directly participate in the extraction work of magnetic beads.

Storage method:

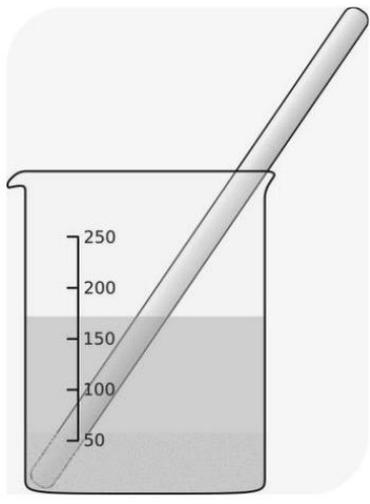
- 1、 After receiving the magnetic beads, first confirm that the packaging is complete, no breakage leakage, etc.
- 2、 Quickly shake well, and then place on a horizontal plane to observe the total amount of magnetic beads. After a certain time, the solid will be lower than the liquid level, which belongs to the normal settlement of the original magnetic, and it is necessary to stir fully before using again to avoid uneven concentration of magnetic beads.
- 3、 Magnetic beads should be sealed at 4 ° C for long-term storage, and the best service life can be up to 12 months.

Preparative working magnetic:

1. Primary magnetic is only used for transport or storage period form and cannot be directly used for extraction.

a. The solid content of the primary magnetic is too high, so it needs to be diluted into the working magnetic concentration before use.

b. The original magnet is easy to settle after standing in the container for a long time. Before use, it should be fully stirred or shaken until the magnetic beads appear oily. After observing that there is no precipitation or caking, it can be diluted.

Common container	Volume of the primary magnetic	Recommended container
	<p>250ml - 1000ml</p>	
	<p>3L - 5L</p>	

2. The recommended amount of primary magnetic is: 10ul/ extraction, and the working magnetic concentration is formulated according to the required system volume.

Dilution examples:

Extraction system	Primary magnetism	Dilution reagent (Water, washing liquid, cracking liquid, etc.)	Diluent
30ul	10ul	20ul	Double distilled water
50ul	10ul	40ul	Double distilled water
300ul	10ul	290ul	Lysate, washing liquid
600ul	10ul	590ul	Lysate, washing liquid
800ul	10ul	790ul	Lysate, washing liquid

- Manual extraction: It is recommended to dilute the original magnetic with water by 3 to 5 times to prepare a working magnetic, and add 30ul to 50 microliters of working magnetic to the cracking liquid (binding liquid) each time to complete the extraction requirements.

- Automatic extraction: It is recommended to add 10ul to every 300-800ul washing solution or cracking solution for direct packaging and use to complete the extraction requirements

3. In addition to the recommended system, the original magnetic can be adjusted in the corresponding range according to the situation of nucleic acid samples and the demand of extraction concentration (amount) in actual application.

- The usage of primary magnetic single extraction has been expanded to 2ul to 15ul

Note:

1, magnetic beads should be fully mixed before use to prevent changing the concentration of magnetic beads.

2. Avoid freeze-thaw and ultrasonic damage to the surface of magnetic beads during the use and preservation of magnetic beads.