BioChain®
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User's Manual and Instructions

PureSil-Silica

Catalog Number: L5011001 and L5011010

Storage Conditions
Store all of the contents at room temperature. Store at 2-8°C after opening the bottle.

Shelf Life
1 year from the date of receipt under proper storage conditions

Description
Our PureSil-Silica product consists of Fe_3O_4 magnetic beads that have been coated with a layer of silicon dioxide (SiO_2). The ability of these beads to bind to nucleic acids makes them a very useful tool in various molecular biology applications, such as genomic/plasmid DNA and RNA purification, along with PCR product clean-up. The resulting pure products are ideal for downstream research applications, which include qPCR and sequencing.

Features

- Non-toxic chemicals
- High DNA recovery

Specifications

I. Core material: Fe_3O_4
II. Surface coating: silica (SiO_2)
III. Concentration: 40 mg/ml

Additional material required

● Binding Buffer (pH 8.0):
Make 4 M Guanidinium thiocyanate, 40 mM Tris, 17.6 mM EDTA solution
Add isopropyl alcohol to 80% final concentration
e.g. 2 ml above stock solution + 8 ml isopropyl alcohol to make 10 ml Binding Buffer
● Wash Buffer (pH 8.0): 10 mM Tris-HCl buffer, 1 mM EDTA, 70 % EtOH
● Elution Buffer (pH 8.0): 10 mM Tris-HCl, 1 mM EDTA

Protocol

Purification of nucleic acid

1. Mix 10 µL sample and 90 µL Binding Buffer with magnetic beads thoroughly by pipetting.
2. Incubate with tilt rotation for 2 minutes at room temperature.
3. Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
4. Discard the supernatant as unbound substances by aspiration with a pipette, and then remove the tube from the magnetic stand.
5. Add 100 µL Wash Buffer and resuspend the beads by pipetting.
6. Place the tube on the magnetic stand for 30-60 seconds to immobilize the beads at tube wall.
7. Discard the supernatant as unbound substances, and then remove the tube from the magnetic stand.
8. Repeat steps 5-7 twice.

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9. Air-dry for about 5 min.
10. Proceed to elution of nucleic acid.

Elution of nucleic acid
11. Add 10-100 µL Elution Buffer (or ddH2O) and resuspend the beads complex by vortexing or shaking.
12. Incubate for 3 minutes at room temperature.
13. Place the tube on the magnetic stand for 30-60 seconds and collect the supernatant in a clean tube.

Important Notes
1. Please keep the reagent away from magnets during storage.
2. Do not freeze.
3. PureSil-Silica is for research use only.

* Contact BioChain® Technical Service for additional recommendations for high throughput or automated mixing.