

Coating of Carboxyl Polystyrene Particles with Amino Modified Oligonucleotides

1. Add 2.5×10^6 carboxyl magnetic particles to 62 μL of 0.1M MES (2-[N-morpholino]ethanesulfonic acid).
2. Add 5 nmoles of amino modified oligonucleotide in 25 μL of 0.1M MES.
3. Add 0.3 mg of EDC (1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride).
4. Vortex and incubate for 20 minutes at ambient temperature.
5. Add 0.3 mg of EDC.
6. Repeat Steps 4 and 5.
7. Incubate for another 80 minutes on a rotary mixer.
8. Centrifuge and remove the supernatant carefully.
9. Resuspend the pellet in 1 mL of 0.1M PBS containing 0.02% Tween-20.
10. Repeat Step 8 and resuspend the pellet in 150 μL of 10mM Tris [hydroxymethyl]aminomethane hydrochloride / 1 mL EDTA (ethylenediamine-tetraacetic acid) pH 8.0 (TE).
11. Centrifuge and remove the supernatant carefully.
12. Resuspend the pellet in 200 μL of TE or IBS. Store at 4°C.

Notes

1. Since the quality of the coated particles depends on the quality of reagents and on the coating procedures, high quality reagents should be used while optimizing the coating conditions. As a result of CD's lack of control over the reagents and coating condition, we cannot guarantee the quality or performance of the coated particles even if the provided procedures are followed.
2. Isotonic Buffered Saline (IBS) is prepared using the following formula:

NaCl	8.0g
KCl	0.28g
NaHPO ₄	0.275g
Na ₂ HPO ₄	2.021g
Sodium Azide	0.2g
Deionized Water	1000mL