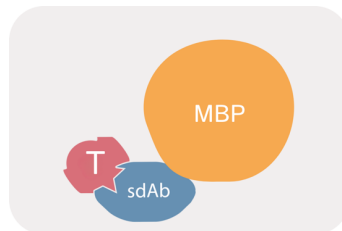


Reconstitution and Storage

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sdAbs MBP fusion

sdAbs MBP fusion are alpaca-derived single-domain antibodies (sdAbs) fused at the C-terminus to maltose binding protein (MBP). These target-specific sdAbs are significantly enlarged by fusion to MBP, making them ideal for immobilization in lateral flow assays.



Sketch of an sdAb MBP fusion in complex with its target protein.

T: target protein

sdAb: single-domain antibody

MBP: maltose binding protein

sdAbs MBP fusion are **lyophilized from PBS pH 7.4** and shipped as lyophilized powder at ambient temperature. The lyophilized reagent can be stored at 2-8°C for up to 12 months.

After reconstitution in 500 µL, the final concentration of sdAb MBP fusion is 2 mg/mL. For optimal performance, store the reconstituted reagent in aliquots at -80°C.

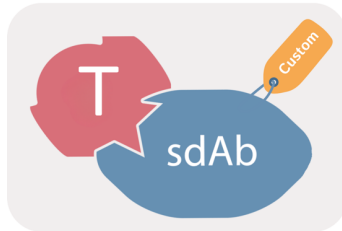
Protocol: Reconstitution of sdAbs MBP fusion

1. Prepare sterile 50% glycerol (v/v) in deionized water.
 2. Open the vial containing the lyophilized sdAb MBP fusion.
 3. Add 500 µL of sterile 50% glycerol (v/v) in deionized water.
 4. Mix gently and allow to sit at room temperature for ~5 min.
 5. Optional: Briefly spin down the vial for 2 min at 100 xg using a 50 mL conical tube with tissue paper at the bottom.
 6. Distribute into aliquots. Use small tubes and avoid aliquots below 20 µL.
 7. Storage:
 - Short-term: Working aliquot can be stored at -20°C for up to 4 weeks.
 - Long-term: Ideally store at -80°C (up to 6 month).
- Note:
- Avoid repeated freeze-thaw cycles.

Only for research applications, not for diagnostic or therapeutic use!

Unconjugated sdAbs

Unconjugated sdAbs are alpaca-derived single-domain antibodies (sdAbs) that generally feature a single ectopic cysteine at the C-terminus. This allows for site-specific conjugation according to the user's preference. These target-specific sdAbs are intended for custom applications requiring direct conjugation to a particular fluorophore, DNA oligonucleotides, or other compounds.



Sketch of a custom-conjugated sdAb in complex with its target protein.

T: target protein

sdAb: single-domain antibody

Custom: custom label coupled to an ectopic cysteine

Unconjugated sdAbs featuring an ectopic cysteine are **lyophilized from 5 mM KPi pH 6.0, 300 mM NaCl, 0.5 mM EDTA pH 6.0** and shipped as lyophilized powder at ambient temperature. The lyophilized reagent can be stored at 2-8°C for up to 12 months. Ideally, the reagent should be reconstituted immediately before use according to the standard protocol A.

After reconstitution in 250 μ L, the final concentration of unconjugated sdAb is 1 mg/mL.

A. Standard reconstitution protocol for immediate use

Note: It is highly recommended to follow this standard protocol for reconstitution and to perform the conjugation reaction immediately after reconstituting the reagent.

8. Open the vial containing the lyophilized unconjugated sdAb.
9. Add 250 μ L of deionized water.
10. Mix gently and allow to sit at room temperature for ~5 min.
11. Optional: Briefly spin down the vial for 2 min at 100 xg using a 50 mL conical tube with tissue paper at the bottom.
12. Immediately proceed to the custom conjugation reaction.
Do not freeze. Freezing and/or storage may result in loss of reactivity.

B. Alternative reconstitution protocol for further storage

Note: **Storage after reconstitution is not recommended** as it may result in loss of reactivity of the ectopic cysteine. **NanoTag does not guarantee the performance of reagents stored after reconstitution.**

1. Open the vial containing the lyophilized unconjugated sdAb.
2. Add 250 μ L of sterile 50% glycerol (v/v) in deionized water.
3. Mix gently and allow to sit at room temperature for ~5 min.
4. Optional: Briefly spin down the vial for 2 min at 100 xg using a 50 mL conical tube with tissue paper at the bottom.
5. Aliquot, overlay with argon and store at -80°C. Avoid freeze-thaw cycles.

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