NanoTag Biotechnologies

# Reconstitution and Storage

## SyliteD1.1 anti-Gephyrin

SyliteD1.1 anti-Gephyrin is a short dimeric peptidic probe that specifically binds gephyrin in inhibitory synapses[1]. We provide SyliteD1.1 anti-Gephyrin (Cat. No. P4001-SC5) fluorescently labeled with sulfo-cyanine 5 (SC5). In super-resolution microscopy, it precisely localizes the inhibitory synapse and enables nanoscale measurements[1]. The probe contains extra lysines to allow post-staining fixation in place.

SyliteD1.1 anti-Gephyrin peptide is 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 200 µL, the final concentration of the peptide is 5 µM. For optimal performance, store the reconstituted reagent in aliquots at -80°C.

### Protocol: Reconstitution of SyliteD1.1 anti-Gephyrin

The reagent can be reconstituted in 50% glycerol (v/v) in PBS or DMSO. The preferred storage condition will depend on the intended downstream application. For application on living cells, storage in 50% glycerol may be the preferrablem, while DMSO ensures sterile handling and optimal long-term stability.

1. Choose and prepare appropriate reconstitution solution.
2. Open the vial containing the lyophilized peptide.
3. Add 200 µL of sterile 50% glycerol (v/v) in PBS or 200 µL DMSO.
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 x*g* 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 for up to 4 weeks at -20°C in 50% glycerol/PBS or at 4°C in DMSO.
   - Long-term: Ideally store at -80°C (up to 6 month).

[1] Khayenko V, Schulte C, Reis SL, et al. A Versatile Synthetic Affinity Probe Reveals Inhibitory Synapse Ultrastructure and Brain Connectivity. *Angew Chem Int Ed Engl.* 2022;61(30):e202202078. doi:10.1002/anie.202202078.

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

NanoTag Biotechnologies GmbH, Rudolf-Wissell-Str. 28a, 37079 Göttingen, Germany
Phone: +49 551 50556-365, E-mail: info@nano-tag.com, Web: www.nano-tag.com