

Dec 04, 2023

Version 2

Tetraspeck Bead Imaging V.2

DOI

dx.doi.org/10.17504/protocols.io.4r3l22br4l1y/v2

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Protocol Citation: Joseph S Beckwith 2023. Tetraspeck Bead Imaging . protocols.io

https://dx.doi.org/10.17504/protocols.io.4r3l22br4l1y/v2 Version created by Joseph S Beckwith

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Protocol status: Working

We use this protocol and it's working

Created: December 04, 2023



Last Modified: May 31, 2024

Protocol Integer ID: 91759

Keywords: ASAPCRN, imaging tetraspeck bead, tetraspeck beads on glass coverslip, tetraspeck bead imaging, glass coverslip,

bead, imaging

Funders Acknowledgements:

ASAP

Grant ID: ASAP-000509

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Abstract

Protocol for imaging tetraspeck beads on glass coverslips.

Troubleshooting



Slide Preparation

Glass coverslips (Fisher Scientific, 12373128, #1 thickness 22 mm x 50 mm) were plasma cleaned for 30 min (Ar plasma cleaner, PDC-002, Harrick Plasma).

30m

2 Stick a frame-seal slide chamber (9 mm x 9 mm, SLF0201, Biorad) on the cover glass. Use some blunt tweezers to press down the sticker on the glass.

5m

3 Add 50 μ l of 0.01 % w/v poly-L-lysine (PLL, P4707, Sigma-Aldrich) to the well and wait for 10-20 min.

20m

4 Use a pipet to remove excess PLL.

2m

Wash with 50 μ l of filtered (0.02 μ m syringe filter, Whatman, 6809-1102) PBS. Pipet up and down in the corners of the well to wash. Repeat this step 3 times.

5m

Remove excess PBS and add 50 μ l of the diluted TetraSpeck (1:625 dilution, 0.1 μ m diameter TetraSpeck Microspheres, Thermo Fisher) beads to the well. Wait 2-3 minutes to let the beads settle and attach to the PLL-coated glass.

3m

7 Remove excess solution using a pipet.

2m

8 Wash with 50 μ l of filtered PBS. Pipet up and down in the corners of the well to wash. Repeat this step 3 times.

2m

9 Remove excess PBS and add 50 μ l filtered PBS to the well. The sample should not dry out!

1m

Imaging

10 Image the slide on a light microscope.