

Oct 17, 2023

## Microscopy-based GSH bead protein-protein interaction assay

DOI

<https://dx.doi.org/10.17504/protocols.io.4r3l27xdxg1y/v1>

Minghao Chen<sup>1</sup>, Xuefeng Ren<sup>1</sup>

<sup>1</sup>Department of Molecular and Cell Biology, University of California, Berkeley, Berkeley, CA 94720, USA.



Minghao Chen

University of California, Berkeley

### Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



**DOI:** <https://dx.doi.org/10.17504/protocols.io.4r3l27xdxg1y/v1>

**Protocol Citation:** Minghao Chen, Xuefeng Ren 2023. Microscopy-based GSH bead protein-protein interaction assay. protocols.io <https://dx.doi.org/10.17504/protocols.io.4r3l27xdxg1y/v1>

**License:** This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

**Protocol status:** Working

We use this protocol and it's working

**Created:** June 06, 2023

**Last Modified:** May 31, 2024

**Protocol Integer ID:** 82919

**Keywords:** ASAPCRN, bead protein, protein interaction, assay microscopy, based gsh, protein, microscopy, assay

**Funders Acknowledgements:**

Aligning Science Across Parkinson's (ASAP) initiative

Grant ID: ASAP-000350

## Abstract

Microscopy-based GSH bead protein-protein interaction assay



- 1 Wash pre-blocked glutathione sepharose beads (GE Healthcare) with the reaction buffer (25 mM HEPES at pH 7.5, 150 mM NaCl, 1 mM MgCl<sub>2</sub> and 1 mM TCEP) three times.
- 2 Make a mixture of 1  $\mu$ M purified GST tagged protein and 500 nM purified fluorescent protein in total 70  $\mu$ l
- 3 Incubate at  Room temperature for  00:30:00 , samples were mixed with additional 100  $\mu$ L reaction buffer.
- 4 Transferred to the observation chamber for imaging.
- 5 Acquire images on a Nikon A1 confocal microscope with a Nikon Plan APO VC 20x/0.75 NA UV Microscope Objective.

30m