

Materials List for:

Using In Vitro Fluorescence Resonance Energy Transfer To Study The Dynamics Of Protein Complexes At A Millisecond Time Scale

Melaku Garsamo, Yun Zhou, Xing Liu
 TODO, TODO

Correspondence to: Xing Liu at xingliu@purdue.edu

URL: <https://www.jove.com/video/59038>

DOI: [doi:10.3791/59038](https://doi.org/10.3791/59038)

Materials

| Name | Company | Catalog Number | Comments |
|---------------------------------------|-------------------------|------------------|---|
| Anion exchange chromatography column | GE Healthcare | 17505301 | HiTrap Q FF anion exchange chromatography column |
| Benchtop refrigerated centrifuge | Eppendorf | 2231000511 | |
| BL21 (DE3) Competent Cells | ThermoFisher Scientific | C600003 | |
| Calcium Chloride | Fisher Scientific | C78-500 | |
| Cation exchange chromatography column | GE Healthcare | 17505401 | HiTrap SP Sepharose FF |
| Desalting Column | GE Healthcare | 17085101 | |
| Floor model centrifuge (high speed) | Beckman Coulter | J2-MC | |
| Floor model centrifuge (low speed) | Beckman Coulter | J6-MI | |
| Fluorescence SpectraViewer | ThermoFisher Scientific | | https://www.thermofisher.com/us/en/home/life-science/cell-analysis/labeling-chemistry/fluorescence-spectraviewer.html |
| FluoroMax fluorimeter | HORIBA | FluoroMax-3 | |
| FPLC | GE Healthcare | 29018224 | |
| GGGG ^{AMC} peptide | New England Peptide | custom synthesis | |
| Glutathione beads | GE Healthcare | 17075605 | |
| Glycerol | Fisher Scientific | G33-500 | |
| HEPES | Fisher Scientific | BP310-100 | |
| Isopropyl-β-D-thiogalactoside (IPTG) | Fisher Scientific | 15-529-019 | |
| LB Broth | Fisher Scientific | BP1426-500 | |
| Ni-NTA agarose | Qiagen | 30210 | |
| Ovalbumin | MilliporeSigma | A2512 | |
| pGEX-4T-2 vector | GE Healthcare | 28954550 | |
| Protease inhibitor cocktail | MilliporeSigma | 4693132001 | |
| Reduced glutathione | Fisher Scientific | BP25211 | |
| Refrigerated shaker | Eppendorf | M1282-0004 | |
| Rosetta Competent Cells | MilliporeSigma | 70953-3 | |
| Size exclusion chromatography column | GE Healthcare | 28990944 | Superdex 200 10/300 GL column |
| Sodium Chloride (NaCl) | Fisher Scientific | S271-500 | |
| Stopped-flow fluorimeter | Hi-Tech Scientific | SF-61 DX2 | |
| TCEP·HCl | Fisher Scientific | PI20490 | |
| Thrombin | MilliporeSigma | T4648 | |

| | | | |
|--------------------------|-------------------|-----------|---|
| Tris Base | Fisher Scientific | BP152-500 | |
| Ultrafiltration membrane | MilliporeSigma | UFC903008 | Amicon Ultra-15 Centrifugal Filter Units, Ultra-15, 30,000 NMWL |