

# Customized protein design, purification, and tethering (cysteine)

Measure folding and conformational changes on your customized protein of interest. Also includes beads and DNA handles that specifically attach to your protein of interest with incorporated cysteines through cysteine–maleimide chemistry.



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Protein Folding and  
Conformational Changes  
**Customized protein design,  
purification, and tethering  
(cysteine)**

This batch was produced on

& works best within 6 months

## Materials supplied:

- **Maleimide-modified oligonucleotides:** Dry pellet (not visible), 2 vials.  
Lyophilized oligonucleotides for protein labeling using maleimide–cysteine chemistry.

 Store at  
**-20°C**

- **Biotinylated and digoxigenin-labeled DNA handles (529 bp):**  
4  $\mu$ l, 10 vials. Handles mix (50/50) with an overhang complementing the maleimide-modified oligonucleotides.

 Store all  
materials  
at **-80°C**

- **TCEP (10 mM):** 5  $\mu$ l, 2 vials | 10 mM. Reducing agent.
- **Customized protein:** 40  $\mu$ l | 0.5  $\mu$ g/ $\mu$ l (20  $\mu$ M)

- **Streptavidin-coated silica beads ( $\phi$  1.0–1.4  $\mu$ m):** 25  $\mu$ l | 1% (w/v).  
Beads in PBS with 3 mM sodium azide, with a specific diameter

$\mu$ m.

 Store all  
materials  
at **+4°C**

- **Anti-digoxigenin-coated polystyrene beads ( $\phi$  0.7–0.9  $\mu$ m):** 60  $\mu$ l |  
0.1% (w/v). Beads in PBS with 3 mM sodium azide, with a specific diameter

$\mu$ m.