

Protocol for ABIN5311504

MBP-Catcher High-affinity anti-MBP Single-Domain Antibody (sdAb)

Step-by-Step Protocol

Cell Collection & Lysis

- For mammalian cells, harvest 10^6 - 10^8 cells per sample.
- Lyse cells according to established protocols in 0.2 to 1.5 mL volume.
Buffer recommendations:
 - 2 % Triton X-100, 1 % Tween-20, 1 % NP-40, 1 % CHAPS, 1 % Deoxycholate, 0.1 % SDS
 - 4 M NaCl, 2 M KCl, 1 M $MgCl_2$, 100 mM EDTA
 - 4 M urea
 - 10 mM DTT, 10 mM 2-Mercaptoethanol
 - RNAse A, DNase I, Benzonase, protease inhibitors
- Centrifuge cell lysates in microcentrifuge tubes for 10 minutes at 14000 x g at 4°C. Keep a small samples as "input" fraction.
- Transfer the supernatant to a fresh microcentrifuge tube for each sample and keep at 4°C.

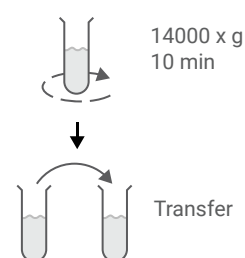
Bead Preparation for MBP Capture

- Homogenize the MBP-Catcher (agarose beads) slurry gently by shaking.
- Transfer 20 μ L bead slurry to a 1.5 mL microcentrifuge tube for each sample.
- Add 1 mL Lysis Buffer to equilibrate MBP-Catcher (agarose beads).
- Centrifuge MBP-Catcher (agarose beads) for 1 minute at 1000 x g and carefully remove the supernatant.
- Repeat wash steps once for a total of 2 washes.

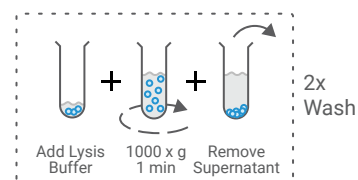
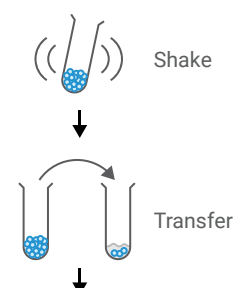
Bead Incubation with Supernatant

- Resuspend equilibrated MBP-Catcher (agarose beads) gently with the cell lysate supernatant.
- Rotate the microcentrifuge tubes for 1 hour at 4°C.
- Centrifuge microcentrifuge tubes for 1 minute at 1000 x g at 4°C. Keep a small sample as "unbound" fraction. Carefully remove the supernatant.
- Resuspend MBP-Catcher (agarose beads) in 1 mL Lysis Buffer.
- Centrifuge MBP-Catcher (agarose beads) for 1 minute at 1000 x g and carefully remove the supernatant.
- Repeat wash steps twice for a total of 3 washes.

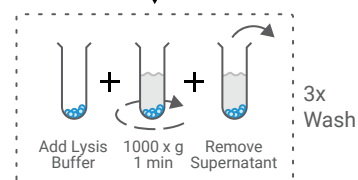
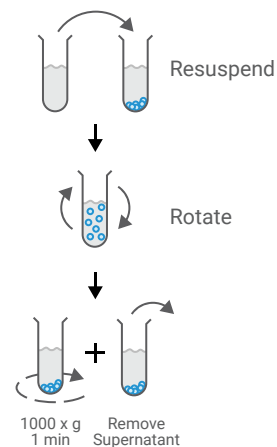
Step 3-4



Step 5-9



Step 10-15

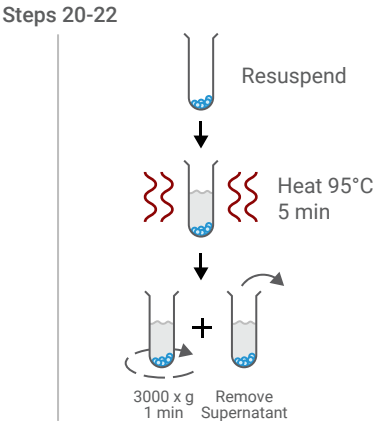
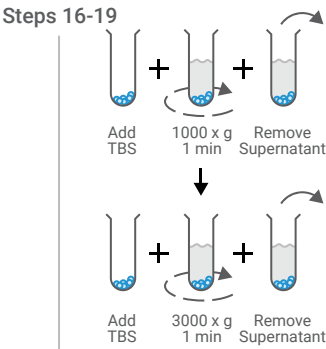


Bead Washing and Solution Changes

- 16. Resuspend MBP-Catcher (agarose beads) gently in 1 mL TBS.
- 17. Centrifuge MBP-Catcher (agarose beads) for 1 minute at 1000 x g and carefully remove the supernatant.
- 18. Resuspend MBP-Catcher (agarose beads) gently in 1 mL TBS.
- 19. Centrifuge MBP-Catcher (agarose beads) for 1 minute at 3000 x g and carefully remove the supernatant.

Elution Preparation

- 20. Resuspend MBP-Catcher (agarose beads) resin in 50 µL 2X SDS sample buffer.
- 21. Heat sample (agarose beads) resin for 5 minutes to 95°C.
- 22. Centrifuge microcentrifuge tubes for 1 minute at 3000 x g and transfer the supernatant to fresh microcentrifuge tubes. Keep the pellet (agarose beads) as backup.



Explore our Full Catcher Product Line

Product	Item No.
GFP-Catcher	ABIN5311508
GFP-Catcher Magnetic Beads	ABIN7272855
RFP-Catcher	ABIN5311510
RFP-Catcher Magnetic Beads	ABIN7529450
BFP-Catcher	ABIN5311512
GST-Catcher	ABIN5311506
MBP-Catcher	ABIN5311504
mNeonGreen-Catcher	ABIN7529451

Contact Us

antibodies-online
PO Box 5201
Limerick, PA 19468
USA

www.antibodies-online.com
support@antibodies-online.com
+1 877 302 8632

antibodies-online GmbH
Schloss-Rahe-Str. 15
52072 Aachen
Deutschland

www.antikoerper-online.de
info@antikoerper-online.de
+49 (0)241 95 163 153



For research use only.
Not for use in clinical diagnostic procedures.
Version Mar 2024