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Chitin binding assay using chitin magnetic beads (NEB)

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Protocol status: In development

We are still developing and optimizing this protocol

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Keywords: chitin magnetic bead, using chitin, chitin, magnetic bead, binding assay, bead, neb

Materials

MATERIALS

 Chitin Magnetic Beads - 5 ml **New England Biolabs Catalog #E8036S**

STEP MATERIALS

 Chitin Magnetic Beads - 5 ml **New England Biolabs Catalog #E8036S**

Protocol materials

 Chitin Magnetic Beads - 5 ml **New England Biolabs Catalog #E8036S**



1 Make the following buffer:

1 X CBD Column Binding Buffer

Tris-HCl	20 mM Adjust pH to 8 using HCl	(2,42 g/L)
NaCl	500 mM	(29,22 g/L)
EDTA	1 mM	(0,292 g/L)
Tween-20	0.05% v/v	500 ul/ 1 L

Gently mix the beads solution and resuspend thoroughly.

 Chitin Magnetic Beads - 5 ml **New England Biolabs Catalog #E8036S**

2 Aliquot 50 ul of beads solution into a 2 ml microfuge tube

3 Apply a magnet for 30 seconds to pull the beads to one side. Remove the excess liquid

3s

4 Wash the beads 3 times with 500 ul of 1x CBD Column Binding Buffer. Apply magnet and remove the liquid.

5 Load 200-500 ul of cell supernatant with the beads.

Note: when making dilutions of the supernatant, dilute in CBD Column Binding Buffer.

6 Mix thoroughly and incubate for 1 hour at 4°C at constant agitation.

1h

7 Apply magnet for 30 seconds and remove supernatant with a pipette. Save the supernatant.

3s

8 Wash beads 3 times with 500 ul of 1x CBD Column Binding Buffer. Apply magnet for 30 seconds and pipette off liquid. Save the wash fractions.

3s



- 9 To remove proteins from the beads, boil beads for 5 minutes in 50 ul SDS-Page sample buffer at 95 °C
- 10 Run fractions on a protein gel

5m