

Data Sheet

MagStrep "type2HC" Beads

Cat. No. 2-1612-002; 2-1612-006

Lot No.: 1612-

IBA Headquarters

IBA GmbH
Rudolf-Wissell-Str. 28
D-37079 Göttingen
Germany
Tel. +49 (0) 551-5 06 72-0
Fax +49 (0) 551-5 06 72-181
E-mail info@iba-go.com
<http://www.iba-go.com>

IBA US Distribution Center

10748 Indian Head Industrial Blvd.
St. Louis, MO 63132
USA
Tel. 1-877-IBA-GmbH
(1-877-422-4624)
Fax 1-888-531-6813
E-mail info@iba-go.com
<http://www.iba-go.com>

Last date of revision
January 2010

Version 1612-1

1. Components			
no.	description	amount	comment
1.	MagStrep "type2HC" Beads (Strep-Tactin coated magnetic beads, 5 % suspension)	2ml or 3 x 2ml	Store at 4 °C
2.	Instructions	1	

2. Properties of MagStrep "type2HC" Beads	
Bead size	0.5- 1.5 μ m
Magnetite	20-40 %
Support	Silica beads
Form	5 % (50 mg/ml) suspension in Dulbecco's PBS; 0.01 % bovine serum albumin; 0.02 % NaN ₃
Binding capacity	Strep-tag II fusion proteins: 0.5-1 nmol/mg beads
Storage	4°C; Do not freeze
Stability	12 months after shipping
Shipment	Ambient temperature

Note: DO NOT FREEZE

For research use only

Important licensing information

This product is based on Strep-Tactin technology covered by intellectual property (IP) rights and on completion of the sale IBA grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-go.com/patents.html> or upon inquiry at info@iba-go.com or at IBA GmbH, Rudolf-Wissell-Str. 28, 37079 Göttingen, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.

Trademark information

The owners of trademarks marked by "®" or "TM" are identified at <http://www.iba-go.com/patents.html>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

Starting point instructions for purification of recombinant *Strep*-tag proteins using MagStrep “type2” or “type2HC” Beads

1. Sample preparation

- Work at a temperature at which your protein is stable. In case of doubt, use 0-4 °C.
- Harvest bacterial cells (centrifugation) and discard supernatant.
- Prepare a cell lysate.
 - Use of IBA-Lyse, Bacterial Lysis Buffer (Cat. No. 2-1017-050; 2-1017-250) is recommended.
 - Alternatively, proceed as described in the manual PR02 available at www.iba-go.com/download.html.
- Prior to purification, remove any aggregates which may be trapped by the beads. Sterile filtration is recommended (0.45 µm filter).

2. Pretreatment of MagStrep Beads (this step is optional but recommended)

- Work at ambient temperature.
- Determine how many magnetic beads are needed to purify the target protein. 20 µl of a homogenous suspension correspond to 1 mg magnetic beads. Binding capacity of type2 beads is typically between 0.25 and 0.5 nmol recombinant *Strep*-tag fusion protein per mg beads while capacity of type2HC beads is typically between 0.5 and 1 nmol per mg beads. Binding capacity of individual proteins may, however, deviate from this standard range. Convenient handling is enabled when working with 2 mg beads in 1.5 ml reaction vessels.
- Separate beads and remove supernatant.
- Equilibrate beads (repeat this step 2 times).
 - resuspend beads in 0.2 ml Buffer W per mg beads.
 - separate beads and remove supernatant.
- Remove tube from magnetic separator.
- Beads are now ready to use.

3. Purification of recombinant *Strep*-tag protein using MagStrep Beads

- Work at a temperature at which your protein is stable. In case of doubt, use 0-4 °C.
- Add 40 µl extract per mg beads when prepared with IBA-Lyse or 40 µl of a 1:1 mixture of cleared lysate, prepared following the protocol of PR02, and Buffer W per mg beads. Do not use more than a total lysate volume of 100 µl per mg beads in case of low and not more than 5 mg beads in case of high expression.
- Resuspend beads and incubate 30 minutes on ice (shake occasionally (2-4x) during incubation bringing beads into suspension).
- Place reaction tube in magnetic separator and remove supernatant.
- Wash step (repeat this step 3 times):
 - Remove reaction tube from magnetic separator and add 100 µl Buffer W per mg beads.
 - Resuspend beads and incubate for 30 seconds.
 - Place reaction tube in magnetic separator to separate beads.
 - Remove supernatant.
- Elution of bound protein (repeat this step for higher recovery):
 - Remove reaction tube from magnetic separator and add 25 µl Buffer BE per mg beads and resuspend.
 - Incubate 5 minutes under occasional shaking (2-3x) bringing beads into suspension.
 - Place reaction tube in magnetic separator to separate beads.
 - Pipet off supernatant containing recombinant protein of interest and transfer it into a clean reaction tube.
- Pool supernatants from the elution steps and analyze protein content via SDS-PAGE and Coomassie staining and quantify according to Bradford using BSA as standard.

Note: Beads are not re-useable

For research use only

Important licensing information

This product is based on *Strep*-Tactin technology covered by intellectual property (IP) rights and on completion of the sale IBA grants respective Limited Use Label Licenses to purchaser. IP rights and Limited Use Label Licenses for said technology are further described and identified at <http://www.iba-go.com/patents.html> or upon inquiry at info@iba-go.com or at IBA GmbH, Rudolf-Wissell-Str. 28, 37079 Göttingen, Germany. By use of this product the purchaser accepts the terms and conditions of all applicable Limited Use Label Licenses.

Trademark information

The owners of trademarks marked by “®” or “TM” are identified at <http://www.iba-go.com/patents.html>. Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.