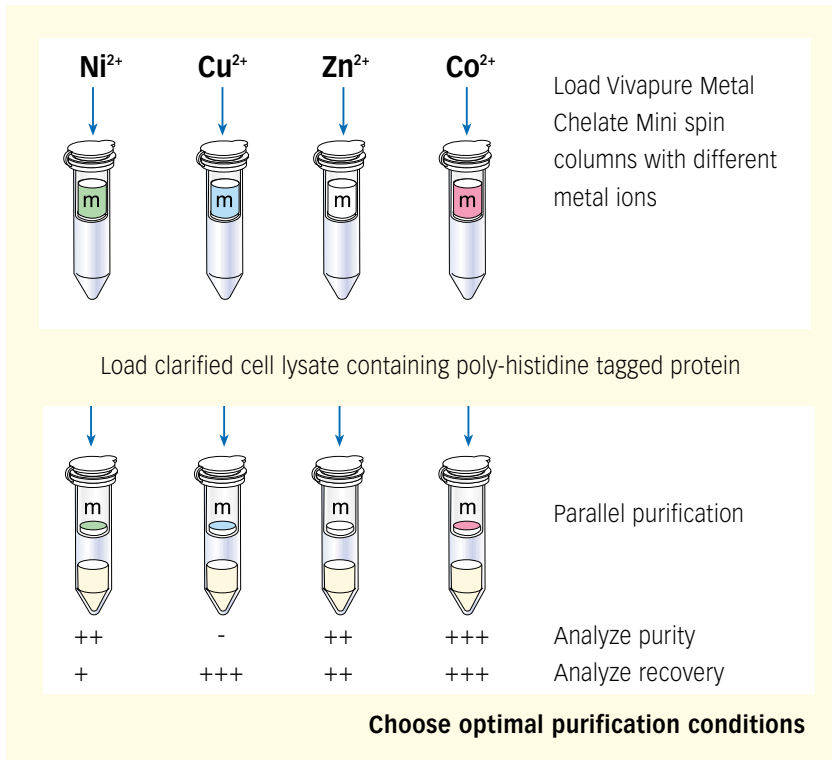


Vivapure Metal Chelate  
Mini spin columns

## Improve your His-Tag purification



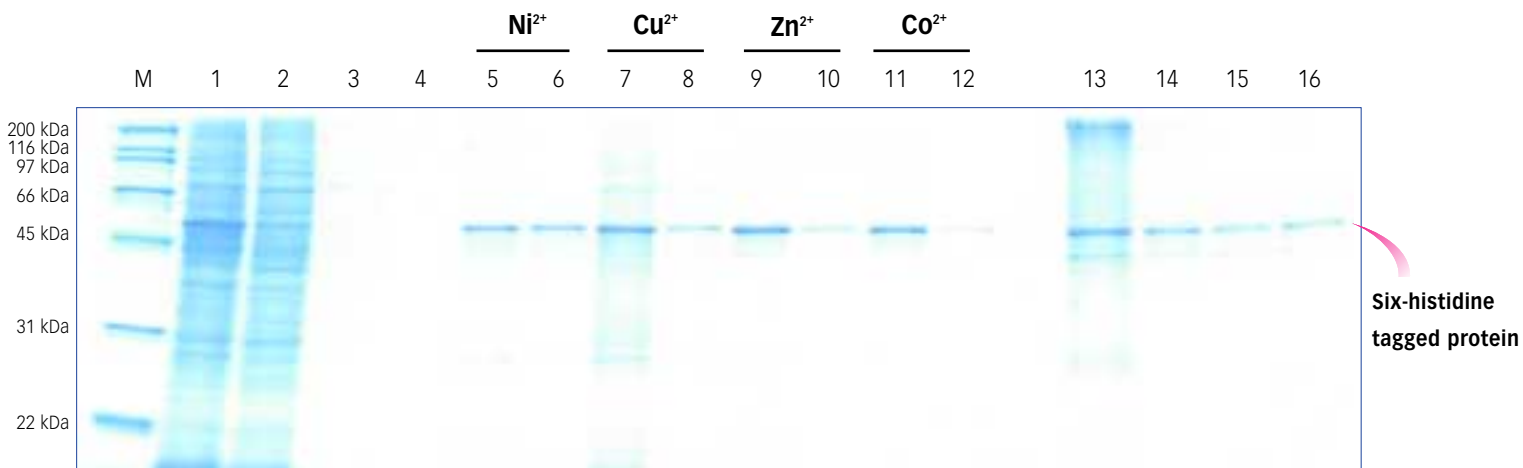
### With Vivapure Metal Chelate Mini spin columns you can optimize your poly-histidine tag purification protocol.

The spin columns were specifically designed to allow you to freely choose the metal ion to be immobilized on the chelate membrane. You can screen for the best purification conditions and optimize the degree of purity of your desired protein!

### Results

Purification of poly-histidine tagged proteins using Vivapure Metal Chelate Mini spin columns leads to a high degree of purity and recovery. Both can be further improved by the use of different metal ions. In the example below, the optimal purity and recovery are achieved by using cobalt ions.

### Effective purification of a six-histidine tagged protein



*E. coli* cell lysates containing a recombinant His<sub>n</sub>-tagged protein were purified using Vivapure Metal Chelate Mini spin columns and competitor products. The Vivapure Metal Chelate Mini spin columns were pre-loaded with different metal ions to optimize the purification conditions. Aliquots of the original sample and of each eluate were applied to a SDS-PAGE and stained with Coomassie™ Blue.

M = Molecular weight marker

Lane 1: *E. coli* cell lysate - original sample

Lane 2: Flow-through

Lanes 3-4: Wash steps no. 1,2

Lanes 5-12: Vivapure Metal Chelate Mini spin columns pre-loaded with different metal ions:

Lanes 5-6: Pre-loaded with nickel, eluates no. 1,2

Lanes 7-8: Pre-loaded with copper, eluates no. 1,2

Lanes 9-10: Pre-loaded with zinc, eluates no. 1,2

Lanes 11-12: Pre-loaded with cobalt, eluates no. 1,2

Lanes 13-14: Competitor A, pre-set to nickel, eluates no. 1,2

Lanes 15-16: Competitor B, pre-set to nickel, eluates no. 1,2

## Purify in parallel

### Innovative technology

Vivapure Metal Chelate Mini spin columns use the principle of Immobilized Metal Chelate Chromatography (IMAC): poly-histidine tagged proteins bind to metal ions immobilized on a patented chelate membrane.

### Simple steps, easy handling

The innovative membrane technology allows easy sample handling in simple and fast centrifugation steps.

### Parallel processing

With Vivapure Metal Chelate Mini spin columns multiple samples can be processed in parallel.

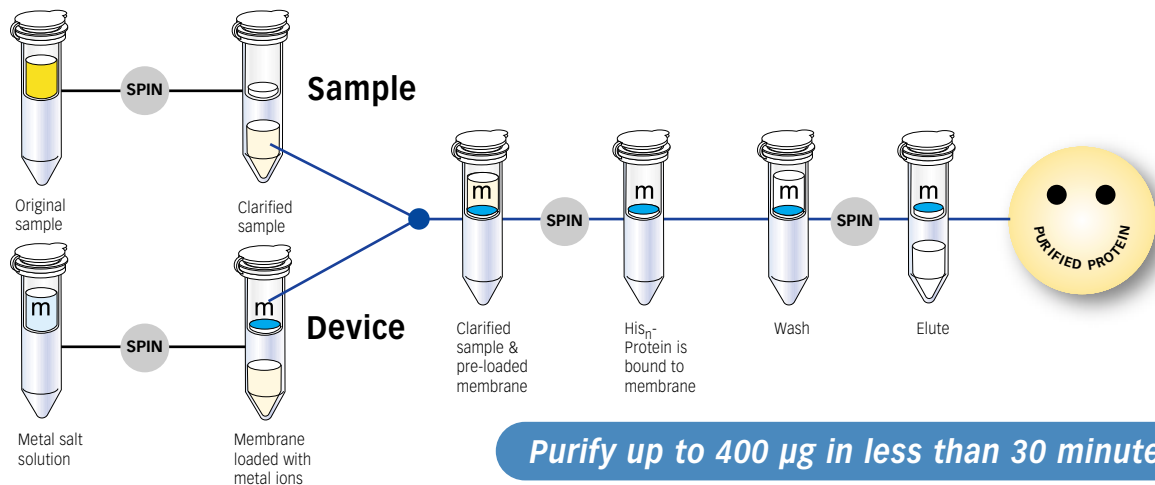
### Find your perfect clone

The spin columns are therefore ideally suited to screen for your best expressing clone and the best purification conditions.



#### Vivapure Metal Chelate Mini spin columns

Cat. No.	VS-MC01MC12
Vivapure Metal Chelate Mini spin columns "m"	12
Clarification Mini spin columns	12
Collection tubes	36
Instruction Manual	1



## Related Products

### Vivapure family:

- Ion Exchange spin columns
- Acidic Protein Purification Kit
- Basic Protein Purification Kit
- DNA Removal Kit
- Albumin Removal Kit
- Epoxy Protein Coupling Kit
- Protein A spin columns

Products also available in **96 well plates and 8 strip format**



### Centrifugal ultrafiltration devices

- Vivaspin 500
- Vivaspin 2
- Vivaspin 4



## Ordering Information

Cat Number	Vivapure Spin Columns	Spin Columns	Cat Number	Vivapure Ion Exchange Maxi Spin Columns	Spin Columns	Centrifuge Tubes	
VS-PA01PA24	Protein A Mini	24	VS-IX20CM08	Vivapure C Maxi M	8	16	
VS-MC01MC12	Metal Chelate Mini	12	VS-IX20CH08	Vivapure C Maxi H	8	16	
Cat Number	Vivapure Kits	Spin Columns	Cat Number	Vivapure Ion Exchange Mega Spin Columns	Spin Columns	Centrifuge Tubes	
VS-PC01EPPC	Epoxy Protein Coupling Kit	12	VS-IX20DM08	Vivapure D Maxi M	8	16	
VS-IX01QHGP	Acidic Protein Purification Kit Q Mini H	8	VS-IX20DH08	Vivapure D Maxi H	8	16	
VS-IX20QHGP	Acidic Protein Purification Kit Q Maxi H	4	VS-IX20QM08	Vivapure Q Maxi M	8	16	
VS-IX01SHGP	Basic Protein Purification Kit S Mini H	8	VS-IX20QH08	Vivapure Q Maxi H	8	16	
VS-IX20SHGP	Basic Protein Purification Kit S Maxi H	4	VS-IX20SM08	Vivapure S Maxi M	8	16	
VS-IX01QHAR	Albumin Removal Kit Q Mini H	12	VS-IX20SH08	Vivapure S Maxi H	8	16	
VS-IX20QHAR	Albumin Removal Kit Q Maxi H	4	Cat Number	Vivapure Ion Exchange Mega Spin Columns	Spin Columns	Centrifuge Tubes	
VS-IX01DMDR	DNA Removal Kit D Mini M	12	VS-IX75QH02	Vivapure Q Mega H	2	2	
VS-IX20DMDR	DNA Removal Kit D Maxi M	6	VS-IX75DH02	Vivapure D Mega H	2	2	
Cat Number	Vivapure Ion Exchange Mini Spin Columns	Spin Columns	Centrifuge Tubes	VS-IX75SH02	Vivapure S Mega H	2	2
VS-IX01ST16	Vivapure Mini H Starter Kit (4 of each ion exchange class)	16	32	VS-IX75CH02	Vivapure C Mega H	2	2
VS-IX01CL24	Vivapure C Mini L	24	48				
VS-IX01CM24	Vivapure C Mini M	24	48				
VS-IX01CH24	Vivapure C Mini H	24	48				
VS-IX01DL24	Vivapure D Mini L	24	48				
VS-IX01DM24	Vivapure D Mini M	24	48				
VS-IX01DH24	Vivapure D Mini H	24	48				
VS-IX01QL24	Vivapure Q Mini L	24	48				
VS-IX01QM24	Vivapure Q Mini M	24	48				
VS-IX01QH24	Vivapure Q Mini H	24	48				
VS-IX01SL24	Vivapure S Mini L	24	48				
VS-IX01SM24	Vivapure S Mini M	24	48				
VS-IX01SH24	Vivapure S Mini H	24	48				



### For more information on related products, please refer to the:

- Vivascience Ultrafiltration Catalog - Vivaspin
- Vivapure® Catalog for kits and devices for protein purification
- Vivapure® Protein A Mini spin column brochure
- Vivapure® Epoxy Protein Coupling kit brochure
- Vivascience Cell Culture Catalog

For current information and application notes, please visit us at [www.vivascience.com](http://www.vivascience.com)

Vivascience Technical Support		Phone	Fax	E-mail
USA	Vivascience Service & Technical Support	+1 877 452 2345 (toll free)	+1 760 918 8281	info.usa@vivascience.com
Europe	Vivascience Support Center	+49 1 802 000 581 (toll free)	+49 1 802 000 583	info@sc.vivascience.de
International	Vivascience Support Center	+49 551 38906 0	+49 551 38906 11	info@sc.vivascience.de
Vivascience Customer Sales				
France	Vivascience S.A.R.L.	+33 169 19 93 23	+33 160 13 95 05	info.france@vivascience.com
Germany	Vivascience AG	+49 551 308 4023	+49 551 308 3289	info.germany@vivascience.com
UK	Vivascience Ltd.	+44 1372 737 159	+44 1372 726 171	info.uk@vivascience.com
USA	Vivascience Inc.	+1 877 452 2345	+1 760 918 8281	info.usa@vivascience.com

### Vivascience AG

Feodor-Lynen-Strasse 21 Phone: +49 511 524875-0 E-mail: [info@vivascience.com](mailto:info@vivascience.com)  
 30625 Hannover, Germany Fax: +49 511 524875-19 Web: [www.vivascience.com](http://www.vivascience.com)