

Protino® Protein Purification Products from MACHERY-NAGEL

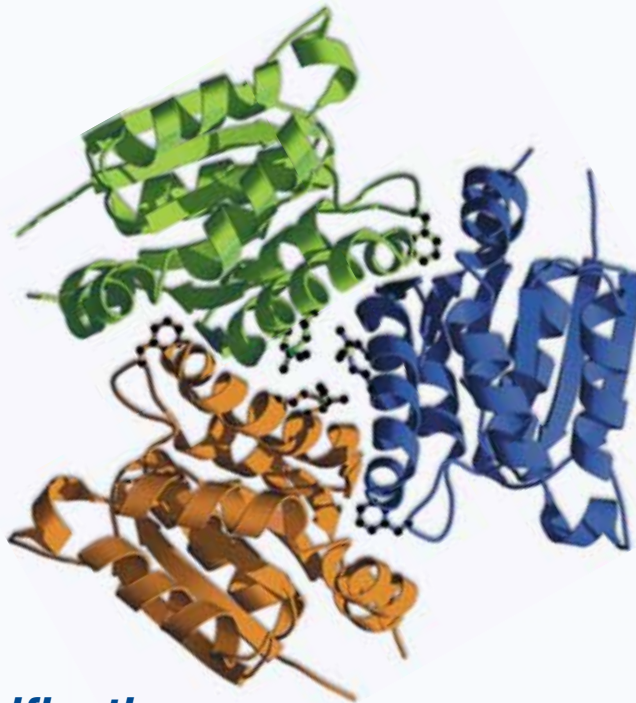


GST-tag Purification

Save money without making compromises!

Protino® Glutathione Agarose 4B

Protino® GST/4B Columns 1 ml



His-tag Purification

Highest flexibility — Make your choice!

Protino® Ni-IDA

Protino® Ni-TED

BIOKÉ
sharing knowledge

Plesmanlaan 1d
2333 BZ Leiden
The Netherlands
T. +31 (0)71 568 10 00
T. Belgium: 0800 71640
F. +31 (0)71 568 10 10
info@bioke.com
www.bioke.com

GST-tag Purification

Save money without making compromises!

Protino® Glutathione Agarose 4B

Protino® GST/4B Columns 1 ml

... bulk resin and ready-to-use FPLC™ columns available

- ▶ **Market-leading performance for an unbeatable price**
- ▶ **Simply copy and paste your procedure — no optimization or protocol change**

Protino® Glutathione Agarose 4B is equivalent to Glutathione Sepharose™ 4B
Protino® GST/4B Columns 1 ml are equivalent to GStrap™ 4B 1 ml columns

- ▶ **Highest flexibility**

Protino® Glutathione Agarose 4B — bulk resin suitable for batch, gravity flow, and FPLC™
Protino® GST/4B Columns 1 ml — ready-to-use columns for FPLC™ applications

- ▶ **Universal use**

Suitable for small proteins, large protein complexes, proteins with low expression rates



Product at-a-glance

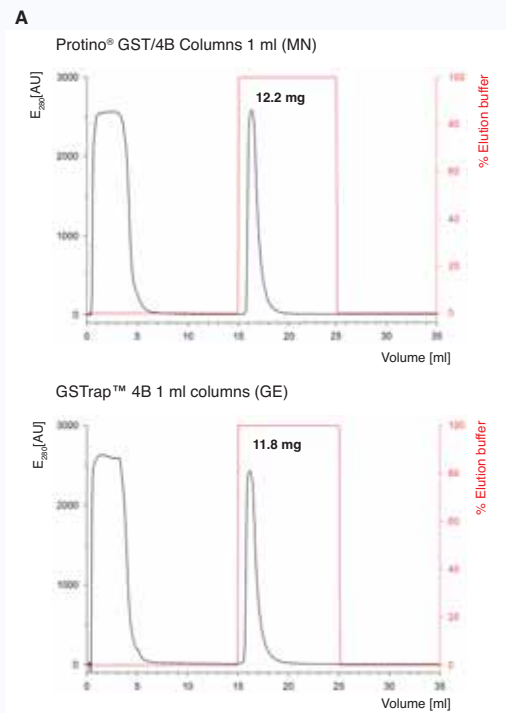
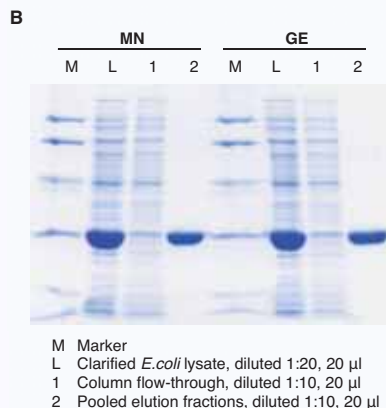
Matrix	4% beaded agarose
Bead size	90 µm
Ligand	Glutathione
Binding capacity*	>8 mg recombinant GST/ml medium
Format	Bulk resin, ready-to-use 1 ml columns for FPLC™ applications
Storage temperature	4-8 °C

Application data

Protino® GST/4B Columns 1 ml show high performance for purification of recombinant Glutathione-S-Transferase on ÄKTAprime™ plus. Yield and purity are comparable to GStrap™ 4B 1 ml columns.

(A) Chromatograms FPLC™ application, system ÄKTAprime™ plus, 2.6 ml sample volume, yield 12.2 mg (MN), 11.8 mg (GE).

(B) SDS-PAGE of pooled elution fractions.



His-tag Purification

Highest flexibility — Make your choice!

Protino® Ni-IDA

Protino® Ni-TED

... bulk resin,
gravity-flow columns,
and 96-well plates
available

- ▶ High protein yield regardless of high purity
- ▶ Highest protein purity
- ▶ Unique silica concept

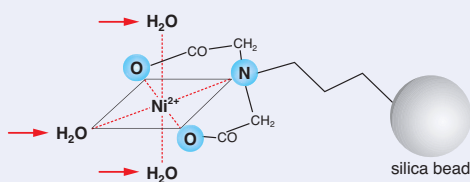
Protino® Ni-IDA, the high affinity product

Protino® Ni-TED, the high specificity product

High pressure and form stability, high flow rates, no clogging
Suitable for batch, gravity flow, and FPLC™
Dry matrix, storage at room temperature

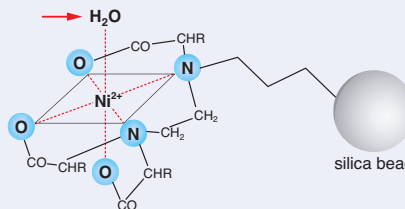
Product at-a-glance

Protino® Ni-IDA - High affinity



Chelating ligand	IDA (Iminodiacetic acid)
Binding sites <i>Ni²⁺ to His-tag</i>	Three → high protein yield
Ligand density	Low → high protein purity
Binding capacity*	20 mg/g (10 mg/ml)
Format	Prepacked gravity-flow columns, bulk resin, 96-well plates

Protino® Ni-TED - High specificity



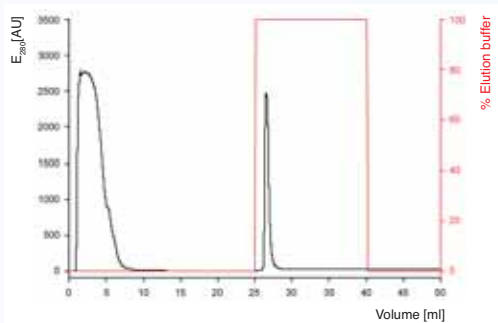
Chelating ligand	TED (Tris(carboxymethyl) ethylenediamin)
Binding sites <i>Ni²⁺ to His-tag</i>	One → highest protein purity >95%
Binding sites <i>ligand to Ni²⁺</i>	Five → minimized metal leaching → high stability against reducing or chelating agents
Binding capacity*	10 mg/g (5 mg/ml)
Format	Prepacked gravity-flow columns, bulk resin

Application data

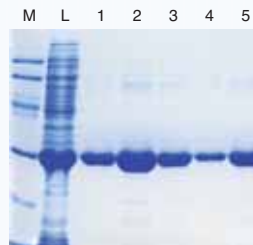
Protino® Ni-IDA Resin is ideally suited for FPLC™ applications. Purification of His-tag Glutathione-S-transferase using ÄKTApurifier™ plus (A). The high purity of isolated target protein is shown by SDS-PAGE analysis (B).

Chromatogram FPLC™ application, system ÄKTApurifier™ plus, column Omnifit 6.6, 1 ml bed volume (0.5 g Protino® Ni-IDA Resin), sample 5 ml clarified *E.coli* lysate, yield 10.7 mg.

A



B



M Marker
L Clarified *E.coli* lysate, diluted 1:5, 10 µl
1-4 Elution fractions 1-4, diluted 1:5, 10 µl
5 Pooled elution fractions, diluted 1:5, 10 µl

Ordering information see last page

Protino® Protein Purification Products from MACHERY-NAGEL

For detailed information about our Protein Purification Products see www.mn-net.com/protein

For detailed information about our Bioanalysis Products see www.mn-net.com/bioanalysis
 ...latest product information, application data, literature, new products

Available Formats

	Prepacked columns	Bulk resin	Prepacked 96-well plates
GST-tag purification	Protino® GST/4B Columns 1 ml 	Protino® Glutathione Agarose 4B 	not available
His-tag purification	Protino® Ni-IDA/TED Packed Columns 	Protino® Ni-IDA/TED Resin 	Protino® Multi-96 Ni-IDA 

Ordering information

Product	Binding capacity*	Pack of/Preps	Cat. No.
GST-tag purification			
Protino® Glutathione Agarose 4B	>8 mg/ml	10/100 ml	745500.10/100
Protino® GST/4B Columns 1 ml	10 mg	5	745510.5
His-tag purification - high affinity			
Protino® Ni-IDA 150 Packed Columns	800 µg	10/50	745150.10/50
Protino® Ni-IDA 1000 Packed Columns	5 mg	5/50	745160.5/50
Protino® Ni-IDA 2000 Packed Columns	10 mg	5/25	745170.5/25
Protino® Multi-96 Ni-IDA	1 mg/well	1 x 96/4 x 96	745300.1/4
Protino® Ni-IDA Resin	20 mg/g (10 mg/ml)	5/30/120/600 g	745210.5/30/120/600
His-tag purification - high specificity			
Protino® Ni-TED 150 Packed Columns	400 µg	10/50	745100.10/50
Protino® Ni-TED 1000 Packed Columns	2.5 mg	5/50	745110.5/50
Protino® Ni-TED 2000 Packed Columns	5 mg	5/25	745120.5/25
Protino® Ni-TED Resin	10 mg/g (5 mg/ml)	5/30/120/600 g	745200.5/30/120/600
Accessories			
Protino® Columns 14 ml/35 ml <small>empty gravity flow columns for use with Protino® Ni-IDA/TED Resin and Protino® Glutathione Agarose 4B</small>		10	745250.10/745255.10
Receiver Columns 20 µm <small>empty mini spin columns with inserted filter frits of 20 µm pore size, for use with Protino® Glutathione Agarose 4B</small>		10/50/250	740522.10/50/250
Receiver Plates 50 µm hydrophilized <small>empty 96-well plates with inserted hydrophilized filter frits of 50 µm pore size, for use with Protino® Glutathione Agarose 4B</small>		4	740689.4

* Protino® Glutathione Agarose 4B: Binding capacity will vary for each GST-tagged protein; Protino® Ni-IDA/TED: Binding capacity refers to 6xHis-GFPuv. Sepharose™, GSTrap™, FPLC™, and ÄKTAprime™ are trademarks of GE Healthcare companies.

KATEN300047/ProtinoGSTHis em1/2009/2008 SCHL
Printed in Germany

Protino®
Protein Purification Products

MACHERY-NAGEL

MACHERY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6-8 · 52355 Düren · Germany

Germany

Tel.: +49 (0) 2421 969-270
e-mail: tech-bio@mn-net.com

USA

Tel.: +1 610-559-9848
e-mail: sales-us@mn-net.com

France

Tel.: +33 (0) 388 682268
e-mail: sales-fr@mn-net.com

Switzerland

Tel.: +41 (0) 62 388 55 00
e-mail: sales-ch@mn-net.com

