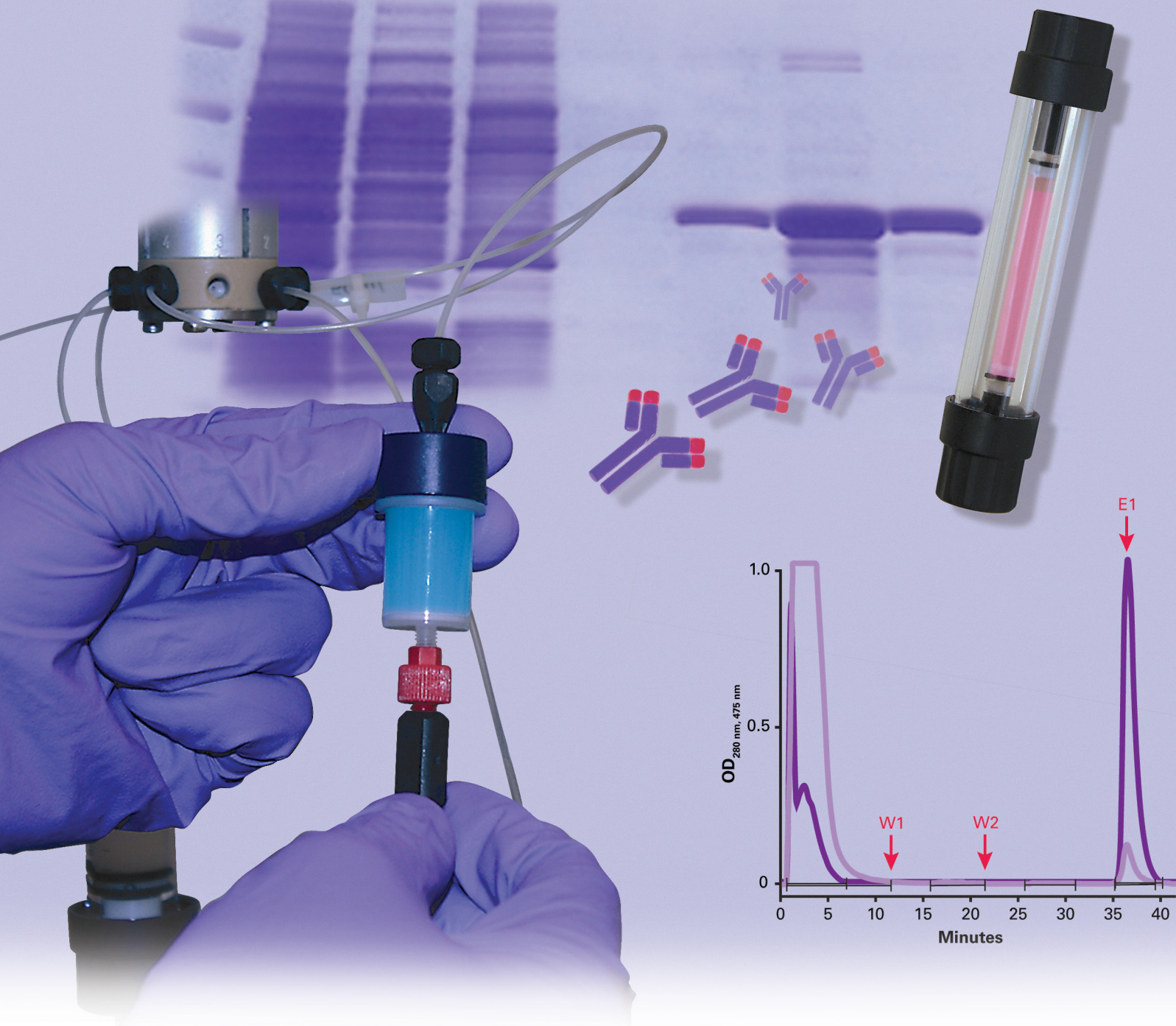


Protein Purification Products

Complete Solutions for All of Your Protein Purification Applications



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TALON® Co Resin—Highest Purity

Advantages:

- Highest purity
- Highest specificity for his-tagged proteins
- Reduced copurification of impurities

Applications:

- Crystallography
- Functional assays
- Structural & functional investigations

Each TALON reactive core is charged with a cobalt ion that has a much higher selectivity for histidine tags than nickel ions. Only proteins containing adjacent histidines or specially positioned histidines are able to bind to TALON. In contrast, the spatial requirement for nickel-based resins is less strict, so using Ni-NTA resins often results in copurification of contaminants. (Figure 1).

TALON resin is designed to maximize your yield of biologically active protein. Choose TALON when purity is of utmost importance or when purifying under native conditions.

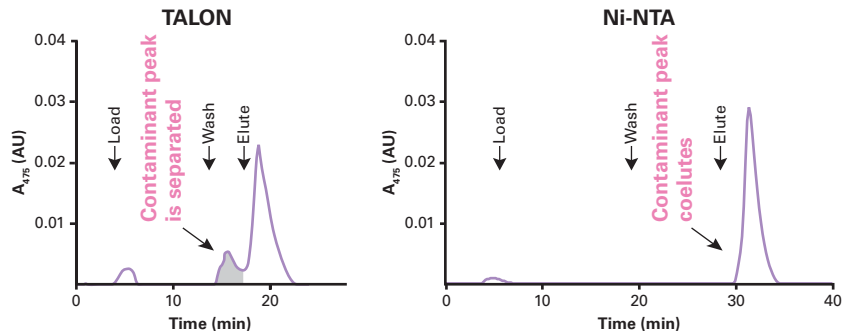


Figure 1. IMAC purification—TALON vs. Ni-NTA. 6xHN-AcGFP1 was purified from Sf21 cells using TALON or Ni-NTA. The chromatogram for each column is shown. The absorbance at 475 nm indicates the amount of target protein (AcGFP1) present in each fraction.

His60 Ni Superflow™ Resin—Highest Capacity

Advantages:

- Highest binding capacity (60 mg/ml)
- Purify proteins under native or denaturing conditions
- Low leakage of Ni²⁺ ions

Applications:

- Protein labeling
- Immunization to produce antibodies
- Animal studies

His60 Ni Superflow Resin is a high-capacity resin for the efficient purification of his-tagged proteins. The resin enables fast, easy, and reproducible chromatographic separations and can be reused for the same protein. His60 Ni Resin is compatible with batch/gravity-flow applications as well as with the major automated liquid chromatography systems and manual syringe processing.

In one application, His60 Ni Superflow Resin performance was compared to the performance of Competitor Q's Ni Superflow resin. 6xHN-AcGFP1 was purified from equivalent amounts of the same sample, following each manufacturer's protocol. Clontech's pEcoli Linear Expression System was used to express 6xHN-AcGFP1 in *E. coli*. Higher yields & better purity were obtained using His60 Ni Superflow Resin (Figure 2).

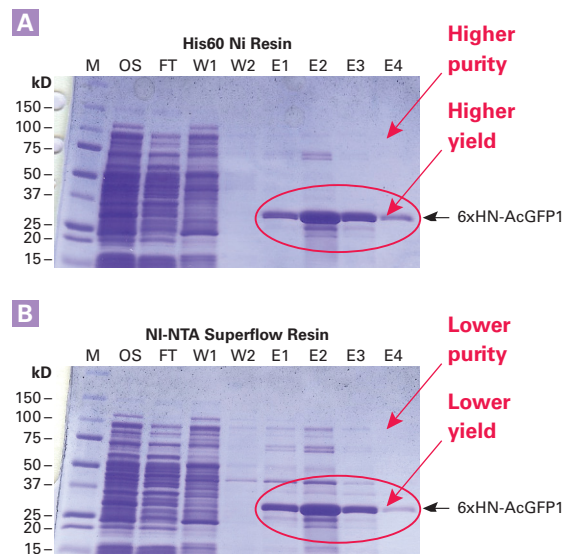


Figure 2. His60 Ni Superflow Outperforms Ni-NTA. Superior yields and better purity were obtained when comparing His60 Ni Superflow (Panel A) to Competitor Q's Ni resin (Panel B).

TALON Resin and Magnetic Beads



TALON Resin

- Use for batch/gravity applications
- Highest purity of your target protein

TALON Superflow Resin

- Use for FPLC applications
- Highest purity of your target protein

TALON CellThru Resin

- Purify proteins directly from crude cell lysates, sonicates, and fermentation liquids
- Ideal for purification of membrane-bound proteins and multiprotein complexes

TALON Magnetic Beads

- Microscale purification or screening of his-tagged proteins (bead particle size: 20–75 μm)
- Elute in small volumes (50–200 μl)

His60 Ni Resin



His60 Ni Superflow Resin

- Use for batch/gravity and FPLC applications
- Highest binding capacity—60 mg/ml
- Superior performance compared to other Ni-based resins (highest capacity and better purity)
- Low nickel ion leakage
- Purify under native or denaturing conditions
- Many sizes are available, from 10 ml to 1,000 ml

Buffers and Detection Reagents



Buffers

- HisTALON Buffer Set: complete buffer set for extraction and purification of his-tagged proteins using TALON resin
- His60 Ni Buffer Set: complete buffer set for extraction and purification of his-tagged proteins using His60 Ni Superflow resin
- xTractor Buffer: optimized lysis buffer for recombinant protein extraction
- xTractor Buffer Kit: complete extraction kit with lysozyme and DNase I, for efficient extraction of high molecular weight proteins

Detection of His-Tags

Universal His Western Blot Kit

- Low background
- His-tags detected in seconds
- Detects 6xHis tags, 6xHN tags, and HAT tags

Antibodies

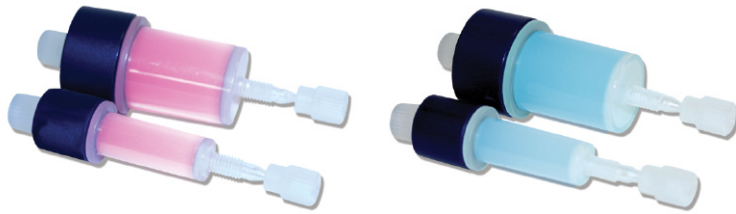
- 6xHis mAb-HRP conjugate
- 6xHis Monoclonal Antibody (Albumin Free)
- 6xHN Polyclonal Antibody

Prepacked Columns Offer Highly Reproducible Results Between Runs

1 ml & 5 ml Cartridges

HisTALON Superflow

His60 Ni Superflow



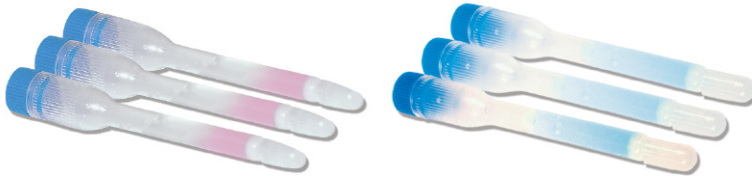
FPLC Cartridges—HisTALON™ & His60 Ni Ready-to-use 1 ml and 5 ml cartridges

- Use on any chromatography system
- Simple manual operation using a syringe
- Can be connected in series to scale-up

Gravity Columns

HisTALON

His60 Ni Superflow



Gravity Columns—HisTALON & His60 Ni Ready-to-use 1 ml columns

- Up to 60 mg pure his-tagged protein per His60 Ni Superflow column
- Up to 20 mg highly pure his-tagged protein per HisTALON column

TALON Single Step Columns

5 ml

20 ml



Single Step Columns—TALON Single Step Ready-to-use 5 ml and 20 ml columns

- Load bacterial culture directly onto column
- On-column extraction and purification
- Load bacterial culture, wash, and elute target protein

TALONSpin Columns



Disposable Spin Columns—TALONSpin™ Ready-to-use prepacked spin columns for small-scale purification

- Rapid, parallel purification in as little as 30 minutes
- Applications: screening of positive clones, trial-level purification

TALON 2 ml Disposable Gravity Columns



Empty 2 ml Disposable Columns—TALON Ready-to-use empty 2 ml gravity columns

- Fill columns with TALON, TALON Superflow, or His60 Ni Superflow resins
- Also suitable for glycoprotein enrichment, phosphoprotein & phosphopeptide enrichment, GST-tag, and antibody purification resins

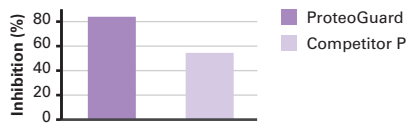
CellThru 10 ml Disposable Columns



Empty 10 ml Disposable Columns—CellThru Ready-to-use empty 10 ml gravity columns

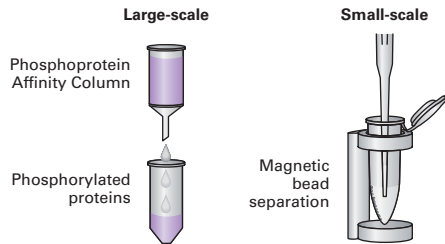
- Fill columns with TALON CellThru, TALON, TALON Superflow, or His60 Ni Superflow resins
- Also suitable for glycoprotein enrichment, phosphoprotein & phosphopeptide enrichment, and GST-tag & antibody purification resins

Other Purification Products



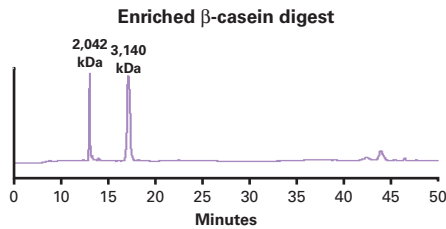
ProteoGuard—Protease Inhibitor Cocktail

- Better protease inhibition than the leading competitor
- More flexible than tablets
- Optimized mix of five different inhibitors



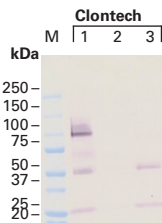
Phosphoprotein Enrichment

- **Large-Scale:** Complete separation of phosphorylated and unphosphorylated proteins using gravity-flow affinity columns
- **Small-Scale:** Complete kit for magnetic bead-based microscale phosphoprotein enrichment from ANY cell or tissue samples (30 minute protocol)
- Percentage of phosphorylated proteins in final eluate: 14–17% (depends on cell type)
- Ideal for cell signaling studies (no radioactivity) or 2D-PAGE



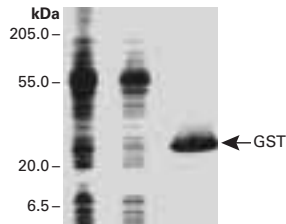
Phosphopeptide Enrichment—Small-Scale

- Rapid, reliable enrichment of phosphopeptides (30 minute protocol)
- Available as magnetic beads or prepacked spin columns
- Complete kits for microscale enrichment of phosphopeptides
- Yields highly concentrated samples ideal for LC or MALDI analysis



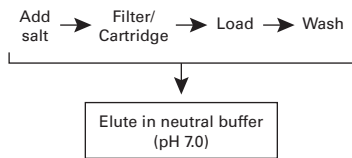
Glycoprotein Enrichment Resin & Detection Kit

- Flexible—enrichment resin can be used with gravity-flow or FPLC columns
- Superior Performance—enrichment resin shows increased specific binding of glycoproteins and reduced nonspecific binding
- Specific—enrichment resin enriches for low- and high-abundance serum glycoproteins



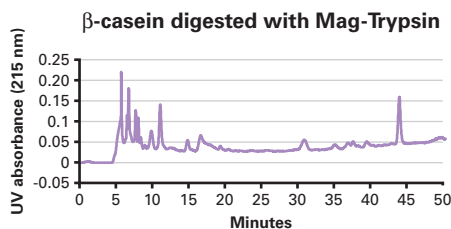
GST-Tag Purification Resin & Kit

- High binding capacity—10 mg/ml
- Yields highly purified protein—eluted protein is free of cellular contaminants
- Reusable—easy protocol for regenerating and storing resin
- Same performance as competitors, but at great prices



Thiophilic Antibody Purification Resins

- Purification at neutral pH—avoid antibody aggregates
- High capacity—20–25 mg Ab/ml resin
- Broad selectivity—purify IgY, IgM, IgE, and scAb
- Yields highly stable purified antibodies
- Reusable resin



Mag-Trypsin Immobilized Magnetic Trypsin

- Rapid and efficient protein digestion for mass spectrometry (MS) applications
- Flexible—use the right amount of Mag-Trypsin for your application
- Eliminates trypsin contamination for downstream applications

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Protein Purification Products Ordering Information

Product	Size	Cat. No.
TALON Resin		
TALON Metal Affinity Resin	10 ml	635501
	25 ml	635502
	100 ml	635503
	250 ml	635504
	2 x 250 ml	635652
	4 x 250 ml	635653
TALON Superflow Metal Affinity Resin	25 ml	635506
	100 ml	635507
	250 ml	635670
	2 x 250 ml	635669
	4 x 250 ml	635668
TALON CellThru	10 ml	635509
	100 ml	635510
TALON Magnetic Beads	2 x 1 ml	635636
	6 x 1 ml	635637
TALON Prepacked		
HisTALON Gravity Columns	5 columns	635655
HisTALON Gravity Columns Purification Kit	20 purifications	635654
TALONspin Columns	10 columns	635601
	25 columns	635602
	50 columns	635603
TALON Single Step Columns (5 ml)	2 columns	635631
	25 columns	635628
TALON Single Step Columns (20 ml)	10 columns	635632
HisTALON Superflow Cartridges (5 x 1 ml)	5 cartridges	635650
HisTALON Superflow Cartridge (1 x 5 ml)	1 cartridge	635683
HisTALON Superflow Cartridges (5 x 5 ml)	5 cartridges	635682
HisTALON Superflow Cartridge Purification Kit (5 x 1 ml)	20 purifications	635649
HisTALON Superflow Cartridge Purification Kit (5 x 5 ml)	5 purifications	635681
TALON Disposable Columns		
CellThru 10-ml Disposable Columns	20 columns	635513
TALON 2 ml Disposable Gravity Column	50 columns	635606
His60 Ni Superflow Resin		
His60 Ni Superflow	10 ml	635659
	25 ml	635660
	4 x 25 ml	635661
	250 ml	635662
	2 x 250 ml	635663
	4 x 250 ml	635664
His60 Ni Prepacked		
His60 Ni Gravity Columns	5 columns	635657
His60 Ni Gravity Columns Purification Kit	20 purifications	635658
His60 Ni Superflow Cartridges (5 x 1 ml)	5 cartridges	635675
His60 Ni Superflow Cartridge (1 x 5 ml)	1 cartridge	635680
His60 Ni Superflow Cartridges (5 x 5 ml)	5 cartridges	635679
His60 Ni Superflow Cartridge Purification Kit (5 x 1 ml)	20 purifications	635674
His60 Ni Superflow Cartridge Purification Kit (5 x 5 ml)	5 purifications	635678

Protein Purification Products Ordering Information

Product	Size	Cat. No.
Accessories: Buffers and Detection		
HisTALON Buffer Set	20 purifications	635651
His60 Ni Buffer Set	20 purifications	635665
TALON Magnetic Beads Buffer Kit	each	635638
xTractor Buffer	100 ml	635656
	250 ml	635671
	500 ml	635625
xTractor Buffer Kit ³	10 extractions	635623
Universal His Western Blot Kit 2.0	50 rxns	635642
c-Myc Monoclonal Antibody	200 µg	631206
HA-Tag Polyclonal Antibody	100 µg	631207
c-Myc Monoclonal Antibody-Agarose Beads	1 ml	631208
6xHis mAb-HRP Conjugate	100 µl	631210
6xHis Monoclonal Antibody (Albumin-Free)	200 µg	631212
6xHN Polyclonal Antibody	200 µl	631213
Other Purification Products		
Proteoguard EDTA-Free Protease Inhibitor Cocktail	10 x 100 µl	635673
GST Purification Kit	5 purifications	635619
Glutathione-Superflow Resin	10 ml	635607
	100 ml	635608
Phosphoprotein Enrichment Kit	6 preps	635624
Phosphoprotein Enrichment Starter Kit	1 purification	635666
Phosphoprotein Kit—Buffer A	500 ml	635626
TALON PMAC Magnetic Phospho Enrichment Kit ¹	each	635641
Phosphopeptide Enrichment Spin Columns	25 columns	635634
Phosphopeptide Enrichment Buffer Kit	each	635635
Magnetic Phosphopeptide Enrichment Kit ²	each	635643
Mag-Trypsin	5 ml	635646
Glycoprotein Western Detection Kit	20 rxns	635648
Glycoprotein Enrichment Resin	10 ml	635647
Antibody Purification—Thiophilic Uniflow Resin	100 ml	635614
Antibody Purification—Thiophilic Superflow Resin	10 ml	635616
	100 ml	635617

¹ The TALON PMAC Magnetic Phospho Enrichment Kit contains TALON Phospho Magnetic Beads (2 x 1 ml), Extraction/Loading Buffer, Wash Buffer, and Elution Buffer.

² The Magnetic Phosphopeptide Enrichment Kit contains TALON Phospho Magnetic Beads (2 x 1 ml), Binding/Wash Buffer, and Elution Buffer.

³ The xTractor Buffer Kit contains xTractor Buffer (200 ml), lysozyme, and DNase I.

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