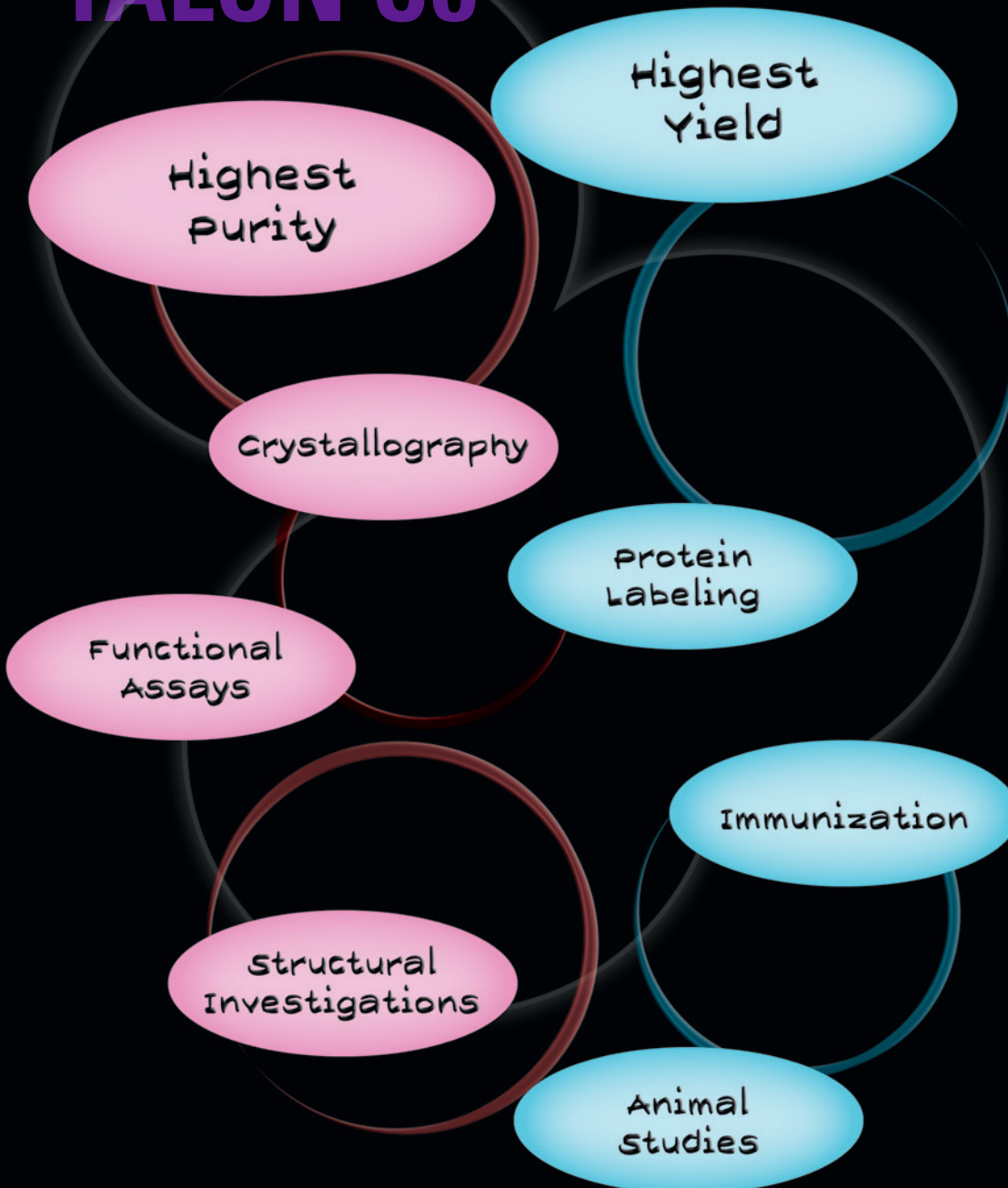


TWO COMPLETE SOLUTIONS FOR ALL OF YOUR PROTEIN PURIFICATION APPLICATIONS

His-Tagged Protein Purification

TALON Co

HIS60 Ni



Clontech

Highest purity

TALON[®] Resin

Visit our website
for more details!
click here...

For the highest purity of your target protein

- Highest purity and very low leakage of Co²⁺ ions
- Highest specificity for his-tagged proteins
- Reduced copurification of proteins
- Available as a 50% slurry, or prepacked 1 ml gravity columns or 1 ml FPLC cartridges

Choose **TALON Co Resin** for applications that require the highest purity, such as:

- Crystallography
- Functional assays
- Structural & functional investigations

TALON is a cobalt-based resin. The TALON reactive core charged with Co²⁺ ion has a very high specificity for his-tags, but binds more weakly than nickel ion. Because of this property, TALON provides the highest purity of your target protein and reduced copurification of proteins. In addition, due to weaker binding between the his-tag and the reactive core, TALON elution occurs under lower levels of imidazole and lower pH levels. Choose TALON when purity is of utmost importance or when purifying under native conditions.

Higher purity - No Copurification of Proteins

TALON resin is designed to maximize your yield of biologically active protein. The stable chelation of the Co²⁺ ion, combined with the specificity of the TALON reactive core, deliver unmatched purity (activity relative to amount of protein) when compared to Ni-based resins (Figure 1).

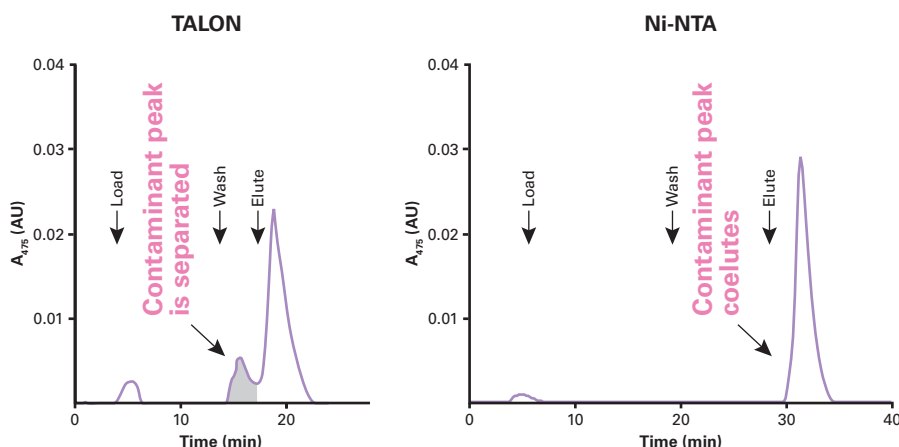


Figure 1. IMAC purification—TALON vs. Ni-NTA. 6xHN-AcGFP1 was purified from Sf21 cells using TALON or Ni-NTA. The chromatogram for each column is shown. The absorbance at 475 nm indicates the amount of target protein (AcGFP1) present in each fraction.

Highest Binding Capacity

His60 Ni Superflow™ Resin

Visit our website
for more details!
click here...

60 mg/ml Binding Capacity

- Highest binding capacity and low leakage of Ni²⁺ ions
- Purify proteins under native or denaturing conditions
- Available as a 50% slurry or as prepacked 1 ml gravity columns

Choose **His60 Ni Superflow Resin** for applications that require large quantities of protein, such as:

- Protein labeling
- Immunization to produce antibodies
- Animal studies

Clontech's **His60 Ni Superflow Resin** is a high-capacity resin for the efficient purification of his-tagged proteins from bacterial, mammalian, and baculovirus-infected cells. His60 Ni Resin is compatible with batch/gravity flow applications as well as with the major automated liquid chromatography systems and manual syringe processing. The resin enables fast, easy, and reproducible chromatographic separations and can be regenerated for multiple uses. His60 Ni Superflow resin is available in a variety of sizes and in prepacked gravity columns.

His60 Ni Superflow outperforms Competitor's Resin

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. Higher yields and better purity were obtained using His60 Ni Superflow Resin (Figure 1).

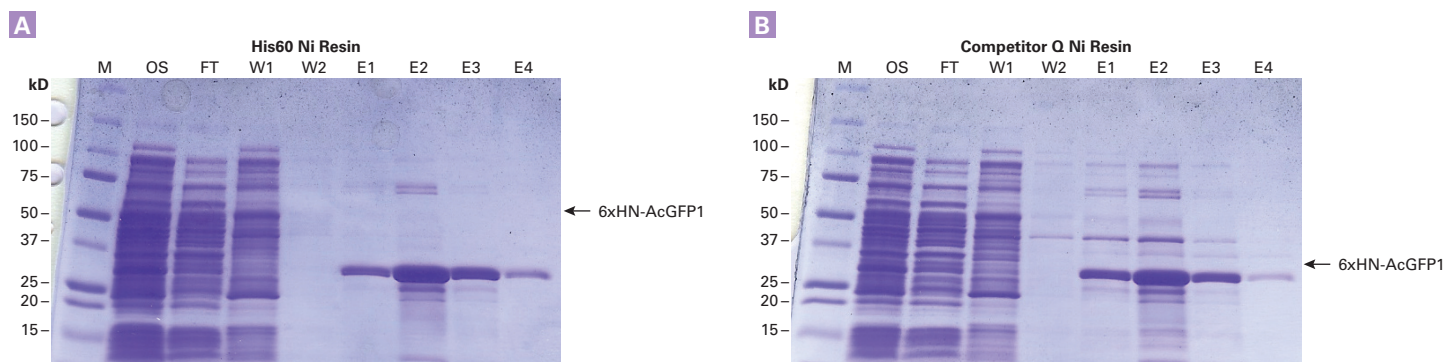


Figure 1. Superior yields and better purity were obtained when using His60 Ni Superflow for purification—as compared to Competitor Q's Ni resin. Clontech's pEcoli Linear Expression System was used to express 6xHN-AcGFP1 in *E. coli*. Equivalent amounts of the same sample were used for comparing His60 Ni Superflow Resin purification (**Panel A**) with Competitor Q Ni Resin purification (**Panel B**). Lane M: Molecular weight marker. Lane OS: Original sample. Lane FT: Flowthrough. Lanes W1 and W2: Wash. Lane E1–E4: Eluted 6xHN-AcGFP1 fractions.

Prepacked columns offer Highly Reproducible Results Between Runs



FPLC Cartridges—HisTALON™

- Ready-to-use 1 ml cartridge
- Use on any chromatography system
- Simple manual operation with a syringe

Gravity Columns—HisTALON and His60 Ni Superflow

- Ready-to-use 1 ml columns
- Up to 20 mg highly pure his-tagged protein per HisTALON column
- Up to 60 mg pure his-tagged protein per His60 Ni Superflow column

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

Spin Columns—TALONspin™ Columns

- Ready-to-use spin columns for small-scale purification
- Rapid, parallel purification in as little as 30 min
- Applications: screening of positive clones, trial-level purification

Visit our website
for more details!
click here...

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 Superflow Resin

- Use for batch/gravity and FPLC applications
- Highest binding capacity – 60 mg/ml
- Highest performance compared to other Ni-based resins (highest binding capacity and better purity)

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

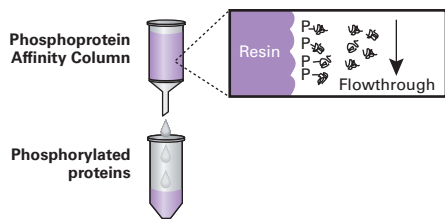
Universal His Western Blot Kit

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

Antibodies

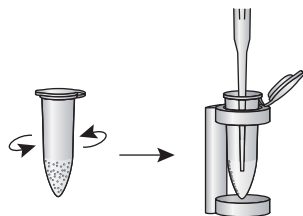
- 6xHis mAb-HRP conjugate
- 6xHis Monoclonal Antibody (Albumin Free)
- 6xHN Polyclonal Antibody

Other Purification Products



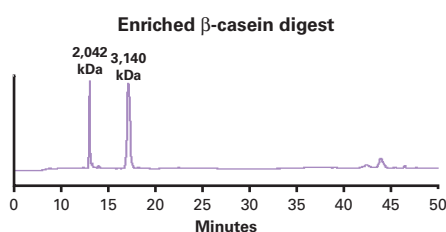
Phosphoprotein Enrichment—Large-Scale

- Complete separation of phosphorylated and unphosphorylated proteins
- Percentage of phosphorylated proteins in final eluate: 14–17% (depends on cell type)
- Ideal for cell signaling studies (no radioactivity) or 2D-PAGE



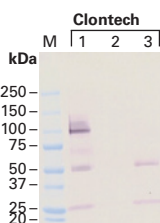
Phosphoprotein Enrichment—Small-Scale

- Quick and easy enrichment of phosphoproteins from ANY cell or tissue samples using Magnetic Beads (30 min protocol)
- Percentage of phosphorylated proteins in final eluate: 14–17% (depends on cell type)
- Complete kit for microscale purification of phosphoproteins
- Ideal for cell signaling studies (no radioactivity) or 2D-PAGE



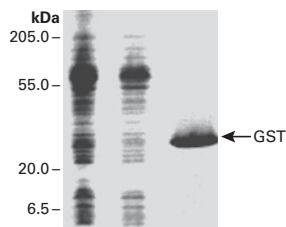
Phosphopeptide Enrichment—Small-Scale

- Rapid, reliable enrichment of phosphopeptides (30 min protocol)
- Available as Magnetic Beads or Prepacked Spin Columns
- Complete kits for microscale purification of phosphopeptides
- Yields highly concentrated samples ideal for LC or MALDI analysis



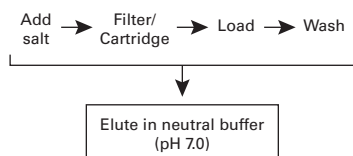
Glycoprotein Enrichment & Detection

- 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



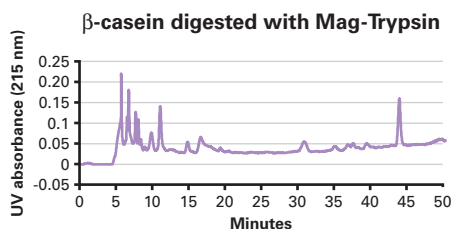
GST-Tag Purification Resin & Kit

- 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



Antibody Purification


- 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



Immobilized Magnetic Trypsin

- Rapid and efficient protein digestion for Mass Spectrometry (MS) applications
- Yields trypsin-free peptide solution (trypsin does not come off the magnetic beads)
- Flexible – use the right amount of Mag-Trypsin for your application
- Eliminates trypsin contamination for downstream applications

Ordering Information

TALON Resin			TALON Prepacked		
Product	Size	Cat. No.	Product	Size	Cat. No.
TALON Metal Affinity Resin	10 ml	635501	HisTALON Cartridge	5 cartridges	635650
	25 ml	635502			
	100 ml	635503	HisTALON Cartridge Purification Kit	20 purifications	635649
	250 ml	635504			
	2 x 250 ml	635652			
4 x 250 ml	635653	HisTALON Gravity Columns	5 columns	635655	
TALON Superflow Metal Affinity Resin					
TALON Superflow Metal Affinity Resin	25 ml	635506	HisTALON Gravity Columns Purification Kit	20 purifications	635654
	100 ml	635507			
	250 ml	635670	TALONspin Columns	10 columns	635601
	2 x 250 ml	635669			
	4 x 250 ml	635668			
TALON CellThru	10 ml	635509	TALON Single Step Columns (5 ml)	2 columns	635631
	100 ml	635510		25 columns	635628
TALON Magnetic Beads	2 x 1 ml	635636	TALON Single Step Columns (20 ml)	10 columns	635632
	6 x 1 ml	635637			
His60 Ni Superflow			Accessories: Buffers and Detection		
Product	Size	Cat. No.	Product	Size	Cat. No.
His60 Ni Superflow	10 ml	635659	HisTALON Buffer Set	20 purifications	635651
	25 ml	635660			
	4 x 25 ml	635661	His60 Ni Buffer Set	20 purifications	635665
	250 ml	635662			
	2 x 250 ml	635663	TALON xTractor Buffer	100 ml	635656
4 x 250 ml	635664	500 ml		635625	
His60 Ni Gravity Columns	5 columns	635657	TALON xTractor Buffer Kit ³	200 ml	635623
His60 Ni Gravity Columns Purification Kit	20 purifications	635658	Universal His Western Blot Kit 2.0	50 rxns	635642
Other Purification Products			c-Myc Monoclonal Antibody	200 µg	631206
Product	Size	Cat. No.	HA-Tag Polyclonal Antibody	100 µg	631207
GST Purification Kit	5 purifications	635619	c-Myc Monoclonal Antibody-Agarose Beads	1 ml	631208
Glutathione-Superflow Resin	10 ml	635607	6xHis mAb-HRP Conjugate	100 µl	631210
	100 ml	635608	6xHis Monoclonal Antibody (Albumin-Free)	200 µg	631212
Phosphoprotein Enrichment Kit	6 preps	635624	6xHN Polyclonal Antibody	200 µl	631213
Phosphoprotein Kit—Buffer A	500 ml	635626	Glycoprotein Western Detection Kit	20 rxns	635648
TALON PMAC Magnetic Phospho Enrichment Kit ¹	2 x 1 ml	635641	<p>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.</p> <p>2 The Magnetic Phosphopeptide Enrichment Kit contains TALON Phospho Magnetic Beads (2 x 1 ml), Binding/Wash Buffer, and Elution Buffer.</p> <p>3 The TALON xTractor Buffer Kit contains xTractor Buffer (200 ml), lysozyme, and DNase I.</p>		
Phosphopeptide Enrichment Spin Columns	25 columns	635634	<p>Notice to Purchaser Superflow™ is a trademark of Sterogene Bioseparations, Inc.</p> <p>The use of these products and technologies may be governed by one or more licensing agreements. To view specific and current licensing information for any Clontech product, please consult the product's webpage on our website at www.clontech.com</p>		
Phosphopeptide Enrichment Buffer Kit	each	635635			
Magnetic Phosphopeptide Enrichment Kit ²	2 x 1 ml	635643			
Mag-Trypsin	5 ml	635646			
Glycoprotein Enrichment Kit	10 ml	635647			
Antibody Purification—Thiophillic Uniflow Resin	10 ml	635613			
	100 ml	635614			
Antibody Purification—Thiophillic Superflow Resin	10 ml	635616			
	100 ml	635617			

Clontech Laboratories, Inc.
A Takara Bio Company
www.clontech.com

United States/Canada: +1.800.662.2566 • Asia Pacific: +1.650.919.7300 • Europe: +33.(0)1.3904.6880 • Japan: +81.(0)77543.6116
For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale. Clontech, the Clontech logo, and all other trademarks are the property of Clontech unless noted otherwise. ©2009 Clontech Laboratories, Inc.
BR983236 IN

