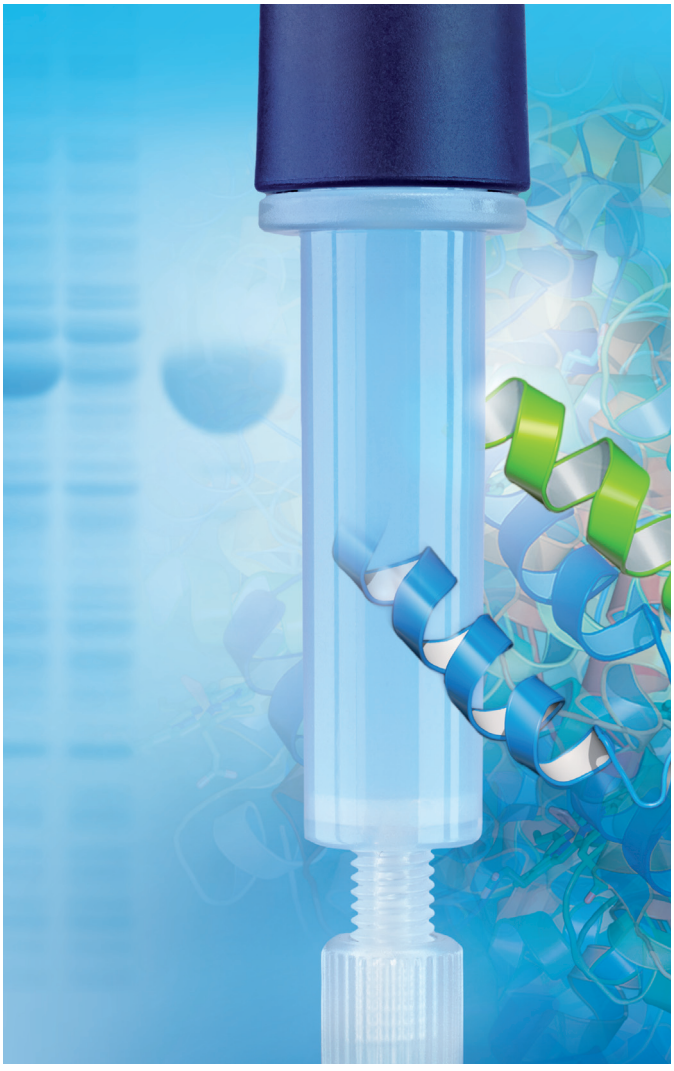
cOmplete His-Tag Purification Resin
Truly compatible with DTT and EDTA

Do you want to combine protein protection with Immobilized Metal Ion Affinity Chromatography?

Now you can protect your valuable proteins with the buffers and reducing agents they require. The Roche cOmplete His-Tag Purification Resin is fully compatible with DTT and EDTA.



Your protein remains safe, even beyond DTT and EDTA. **cOmplete His-Tag Purification Resin** has even been tested with a wide range of buffer substances and salt conditions. In addition, the unique chemistry tightly binds the nickel, offering you many benefits.

- **Choose buffer conditions which suit your protein**
  Use the concentrations your protein requires without loss of capacity or purity, even under harsh conditions.
- **Obtain highly pure and less aggregated protein**
  Minimize nickel leakage to avoid protein oxidation and aggregation.
- **Avoid toxic nickel with your protein and in your lab**
  Reuse the resin multiple times without recharging nickel ions (see Figures 1 and 2).

Add layers of protection
Improve protein protection even further by combining cOmplete His-Tag Purification Resin with cOmplete or cOmplete ULTRA Tablets containing EDTA.

For life science research only.
Not for use in diagnostic procedures.

Are you curious about the all-in-one resin?

Protection

Tailor buffer usage to your protein's needs. Choose optimal conditions for your target protein without reducing resin stability or recharging nickel ions (see Figures 1 and 2).

Convenience and safety

Reuse cOmplete His-Tag Purification Resin for at least 5 times without recharging nickel ions between runs, saving you precious time. We also know your safety is important; therefore the handling of toxic nickel is completely eliminated.

The cOmplete Resin can be used for batch purification as well as on automated systems based on FPLC.

Do you know about the effects of nickel on your proteins?

The presence of nickel can adversely affect the yield and function of your target protein, as metal ions are known to accelerate oxidation of proteins.

- Common proteases identify oxidative modifications as markers and prefer **degradation** of these proteins.
- Formation of protein crosslinks followed by **aggregation**.

cOmplete His-Tag Purification Resin features nickel-chelate chemistry that **minimizes nickel ion leakage** (see Figure 3), tightly binding the nickel ion to the sepharose bead with more links than any conventional IMAC resin.

Figure 1: Tight binding of nickel visualized. Before (left) and after (right) photos of cOmplete His-Tag Purification Resin after 5 times reuse without recharging.

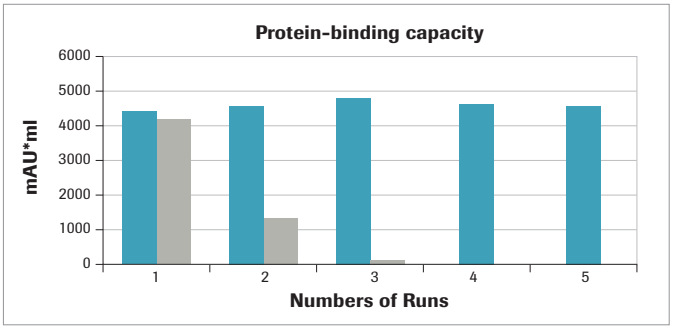


Figure 2: Protein-binding performance with His_6 CFP.
cOmplete His-Tag Purification Resin (blue columns) with 10 mM DTT and EDTA is reused without nickel recharging alongside Resin G (grey columns) with 1 mM EDTA and 5 mM DTT (as specified in manufacturer's package insert). Another competing product, Resin Q (not shown), did not bind any protein at all.

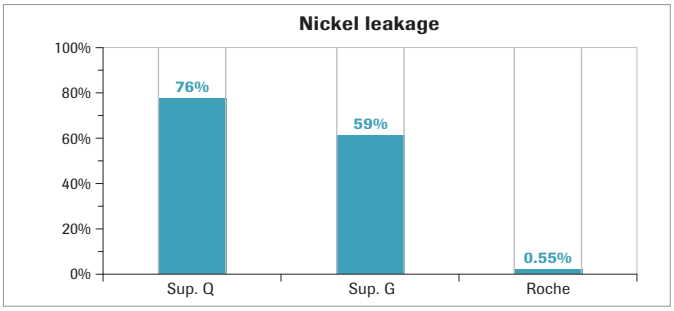


Figure 3: Loss of resin Ni ions under stringent conditions.
One milliliter each of cOmplete His-Tag Purification Resin and 2 commercially available resins were incubated in 9 ml of a buffer containing 50 mM NaH_2PO_4, 300 mM NaCl, pH 8.0, 10 mM EDTA, 10 mM dTT, and 500 mM imidazole. The Roche resin **less than 1% of nickel ions.**

Ordering Information

Products	Catalog Number		Pack Size
cOmplete His-Tag Purification Resin	05 893 682 001		25 ml settled resin volume
	05 893 801 001		200 ml settled resin volume
Related Products	**Catalog Number**		**Pack Size**
	with EDTA	EDTA-free	
cOmplete ULTRA Tablets, Mini, *EASYpack*	05 892 970 001	05 892 791 001	30 tablets in foil blisters (for 10 ml each)
cOmplete ULTRA Tablets, glass vials	05 892 988 001	05 892 953 001	2 × 10 tablets in glass vials (for 50 ml each)
	06 538 304 001	06 538 282 001	6 × 10 tablets in glass vials (for 50 ml each)
cOmplete Tablets, glass vials	11 697 498 001	11 873 580 001	20 tablets in glass vials (for 50 ml each)
	11 836 145 001	05 056 489 001	3 × 20 tablets in glass vials (for 50 ml each)
cOmplete Tablets, Mini, *EASYpack*	04 693 124 001	04 693 159 001	30 tablets in foil blisters (for 10 ml each)
PhosSTOP Tablets, *EASYpack*	04 906 845 001		10 tablets in foil blisters (for 10 ml each)

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