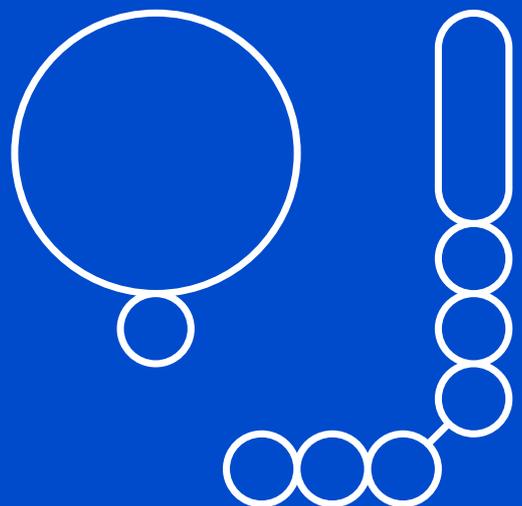


WorkBeads IMAC Resins

WorkBeads – Next generation chromatography resins

WorkBeads™ are Bio-Works' advanced agarose-based resins, designed for purification of biomolecules.

They are produced in several different bead sizes and porosities for both preparative research and bioprocess manufacturing scales. This allows seamless scalability and reproducible results.



WorkBeads IMAC Resins

WorkBeads resins for immobilized metal affinity chromatography (IMAC) are for research and industrial scale purification of biomolecules by utilizing the affinity of poly-histidine amino acids or other metal-binding amino acids to immobilized divalent or trivalent metal ions. WorkBeads NTA and WorkBeads IDA are rechargeable resins supplied either uncharged or pre-charged with Ni²⁺, Co²⁺, Cu²⁺ or Zn²⁺. WorkBeads NiMAC is pre-charged with very strongly bound Ni²⁺ resulting in resistance to substances such as DTT and EDTA. All these different resins are designed to maximise the yield of pure protein.

Advantages of WorkBeads IMAC resins:

- High binding capacity, purity and reproducibility – WorkBeads Ni-NTA binds >60 mg His₆-GFP per mL resin
- Choice of different chelating ligand and metal ion to optimize your purification and expand your range of selectivities
- WorkBeads NiMAC resin offers DTT and EDTA resistance

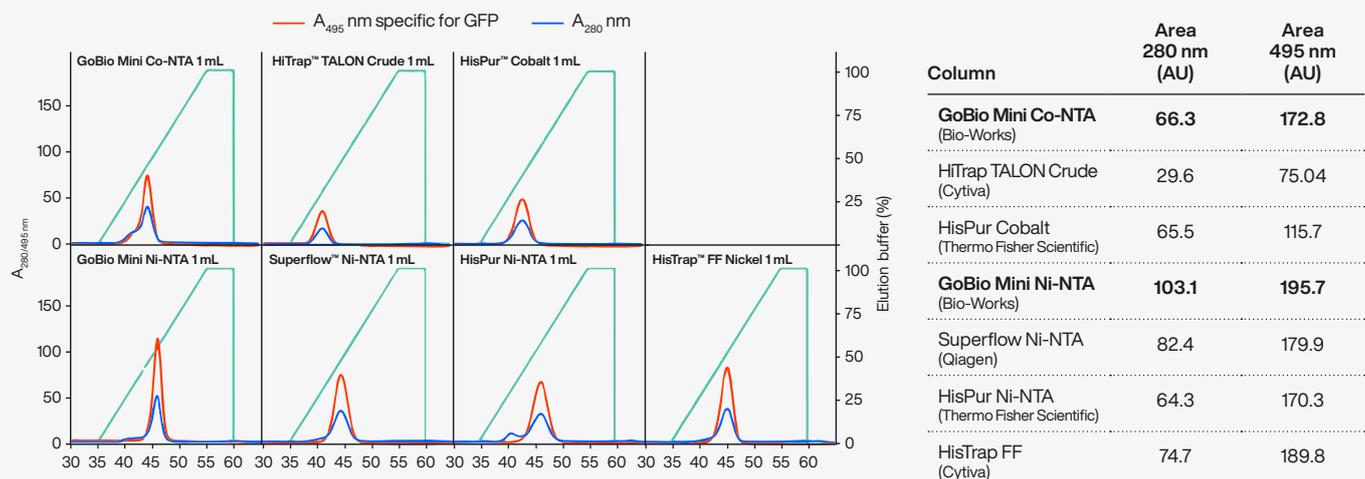
WorkBeads IMAC resins exhibit consistently high Dynamic Binding Capacities

Dynamic Binding Capacity (DBC) refers to the amount of target molecule that binds to the resin under specified flow conditions before the resin is saturated and breakthrough occurs.

The DBC determines how much resin will be required to purify a specific amount of target molecule, making it an important characteristic to consider when selecting a resin.

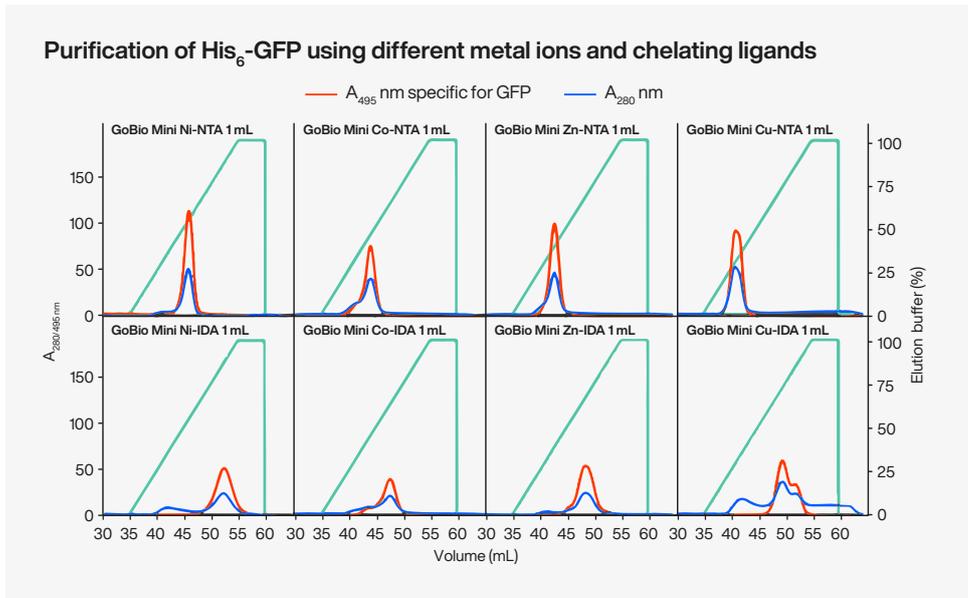


Comparison of His₆-GFP purification elution profiles and analysis of peak areas shows higher yields with WorkBeads 40 Ni-NTA and WorkBeads Co-NTA compared to other suppliers



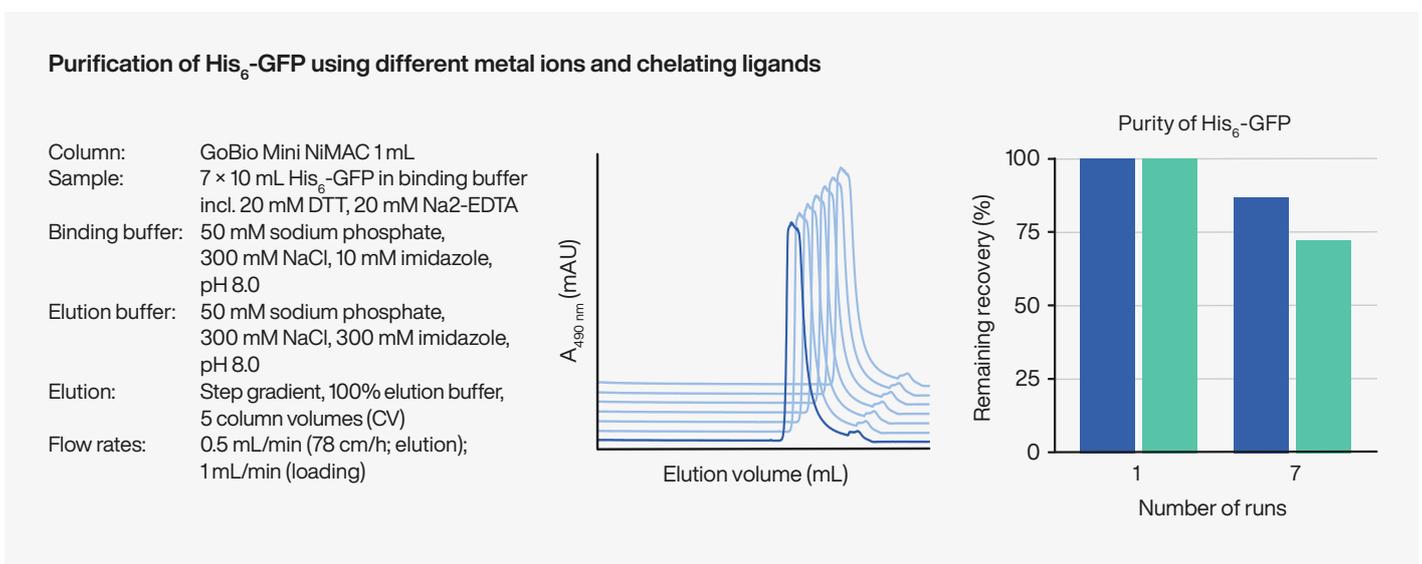
Optimal combination of metal ion and chelating ligand depends on your target protein

Generally speaking, Co^{2+} typically provides higher purity, but a lower yield, compared to Ni^{2+} however several factors influence the final purity of the target protein, including choice of ligand. Ni-NTA is still the combination of choice for many purifications in research and often the first combination to test. For production scale purification of his-tagged proteins, NiMAC is preferred due to negligible leakage of Ni^{2+} ions.



WorkBeads NiMAC is the ideal choice for purification of proteins from eukaryotic cell extracts

WorkBeads NiMAC's proprietary chelating ligand binds nickel so tightly that it can resist chelating and reducing agents such as EDTA and DDT up to a concentration of 20 mM, whilst typically binding approximately 40 mg of His-tagged protein per mL resin.



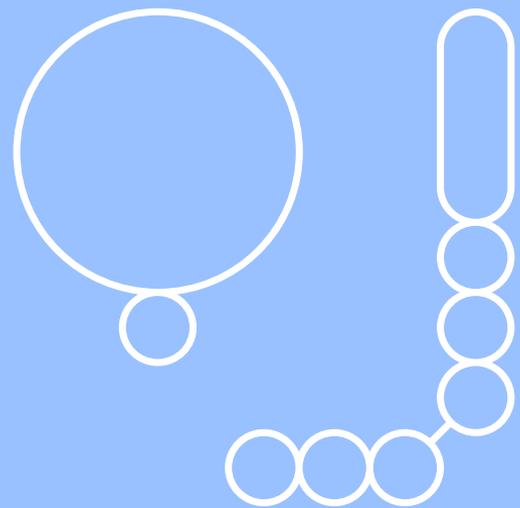
WorkBeads resins are available in a variety of formats for research, process development, scale-up and production. Bulk packages are available from 25 mL up to 10 L. GoBio prepacked formats enable turnkey operation in both lab and process-scale environments.

Free Consultation

Have a specialist walk you through the details.

Find your local representative on bio-works.com/contact

Scan the QR code for a quick way to contact us.



bio-works.com

Our headquarters is located in Uppsala, Sweden, with production and R&D departments in the same facility. This enables us to offer high flexibility and technical service. The company is certified according to the ISO 9001:2015 quality management system. Bio-Works supplies product information, quality documents, technical support, certificates, statements, vendor audits and regulatory support information.