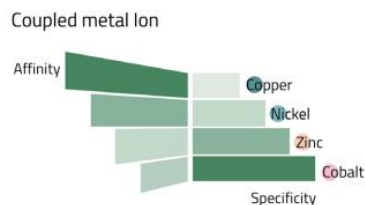
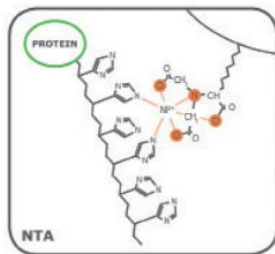


HighSpec Ni-NTA MagBeads

#Cat: NB-40-00035-1ml	Size: 1ml
#Cat: NB-40-00035-5ml	Size: 5ml
#Cat: NB-40-00035-25ml	Size: 25ml
#Cat: NB-40-00035-250ml	Size: 250ml
#Cat: NB-40-00035-4x25ml	Size: 4x25ml



Product Description

HighSpec Ni-NTA MagBeads were developed for the affinity purification of proteins carrying a polyhistidine tag. The affinity matrix is based on spherical magnetic agarose beads, consisting of 6% cross-linked agarose. The material is highly porous to allow optimal protein interaction. Cross-linked agarose is also physically very stable, making it suitable for purification processes without deformation or destruction. Our magnetic beads are very homogeneous in size with a medium particle diameter of 30 μm , yielding a high degree of reproducibility between individual purification runs.

An NTA ligand is coupled to the agarose and carefully loaded with nickel ions to obtain a matrix with highest binding capacity for histidine residues. The metal ion capacity is $> 12 \mu\text{eqv Ni}^{2+}/\text{mL}$. Other possible metal ions are Co^{2+} , Zn^{2+} , Fe^{3+} , Al^{3+} , and Cu^{2+} , resulting in different affinities, e.g. for zinc-finger proteins or phosphorylated proteins. If required, the nickel ions can be removed from the magnetic beads using 5 wash steps with 100 mM EDTA, and the magnetic beads can be recharged with a different metal ion. Alternatively, please contact us for unloaded HighSpec NTA magnetic beads.

HighSpec Ni-NTA MagBeads are delivered as a 25% suspension. Therefore, 1 ml suspension will yield a 250 μl bed volume. The suspension contains 20% ethanol to prevent microbial growth.

Protein Binding Capacity

The protein binding capacity is 80 mg protein per mL of settled beads, as determined by purification of 6xHistagged GFP protein from E. coli cleared lysates, and quantified via spectrophotometry.

Compatibility

HighSpec Ni-NTA MagBeads are very stable and can resist the following conditions in most situations: pH 2-14, 100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile.

Technical Details

Bead Ligand	Ni-NTA (nitrilotriacetic acid+ nickel ion)
Bead size	30 μ m
Filling quantity	25% suspension. (e.g. 10 ml will be 2.5 ml pure beads +7.5 ml storage buffer)
pH Stability	2-14
Binding capacity	80 mg protein / ml pure resin (Tested with eGFP)
Chelator stability	Stable in buffer containing 10 mM DTT and 1 mM EDTA

Shipping & Storage

Shipping Temperature	Ambient temperature
Short-term Storage	In neutral buffer at 4°C
Long-term Storage	In neutral buffer with 20% ethanol at 4 °C

Additional Information

For the protocols and other related information about this product visit our homepage at www.neo-biotech.com , and enter the catalogue number in the search bar above. For purification of His-tagged proteins from dilute solutions, we recommend using HighSpec Ni-NTA MagBeads. For affinity purification of GST-tagged, Rho1d4-tagged or Strep[®]-tagged proteins, Neo Biotech offers dedicated agarose resins, magnetic beads and prepacked cartridges.

Also available are a range of ultrapure detergents and buffers for extraction and purification of proteins. See www.neo-biotech.com for details.

Disclaimer

Our products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

Trademarks: Strep-tag