

HighSpec Co-NTA MagBeads

#Cat: NB-40-00036-1ml	Size: 1mL
#Cat: NB-40-00036-5ml	Size: 5mL
#Cat: NB-40-00036-25ml	Size: 25mL
#Cat: NB-40-00036-4x25ml	Size: 4x25ml
#Cat: NB-40-00036-250ml	Size: 250ml

Product Description

HighSpec Co-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 cobalt ions to obtain a matrix with highest binding capacity for histidine residues. The metal ion capacity is $> 12 \mu\text{eqv Co}^{2+}/\text{mL}$. Other possible metal ions are Ni^{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 cobalt 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 Co-NTA MagBeads.

HighSpec Co-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 30 mg protein per mL of settled beads, as determined by purification of 6xHis-tagged GFP protein from *E.coli* cleared lysates, and quantified via spectrophotometry.

Compatibility

HighSpec Co-NTA MagBeads are very stable and can resist the following conditions in most situations: pH 2-4, 100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile.

Shipping & Storage

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

Additional Information

For protein purification protocols, please visit our webpage at: www.Neo-biotech.com For purification of his-tagged proteins with gravity flow columns and low pressure chromatography, we recommend using HighSpec Co-NTA MagBeads Agarose. For affinity purification of GST-tagged, rho-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

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

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