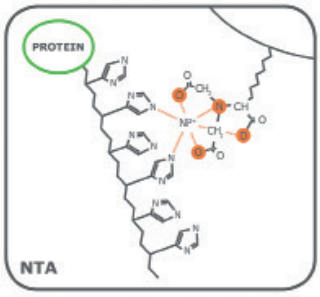
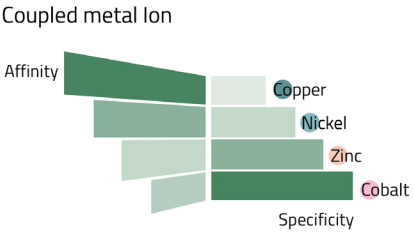
PureCube Ni-NTA MagBeads

Product	Catalog No.	Package size
PureCube Ni-NTA MagBeads (1 ml)	31201	1x 1 ml slurrly (250 µl MagBeads)
PureCube Ni-NTA MagBeads (5 ml)	31205	1x 5 ml slurrly (1.25 ml MagBeads)
PureCube Ni-NTA MagBeads (25 ml)	31225	1x 25 ml slurrly (6.25 ml MagBeads)
PureCube Ni-NTA MagBeads (4 x 25 ml)	31290	1x 25 ml slurrly (6.25 ml MagBeads)





Product Description

PureCube 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 µeqv Ni^{2+}/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 PureCube NTA magnetic beads.

PureCube 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 6xHis-tagged GFP protein from *E.coli* cleared lysates, and quantified via spectrophotometry.

Compatibility

PureCube 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 µm
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 visist our homepage at: https://cube-biotech.com/ , and enter the catalogue number in the search bar above.

For purification of His-tagged proteins from dilute solutions, we recommend using PureCube Ni-NTA MagBeads. For affinity purification of GST-tagged, Rho1d4-tagged or Strep®-tagged proteins, Cube 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 https://cube-biotech.com/products/protein-purification-products/ 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® (IBA GmbH

Cube Biotech GmbH | Creative Campus Monheim | Creative-Campus-Allee 12 | D-40789 Monheim | Germany
Tel.: +49 (2173) 993730 | Fax: +49 (2173) 99 373 99 | contact@cube-biotech.com