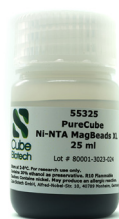
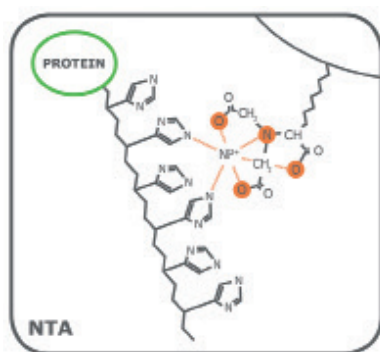


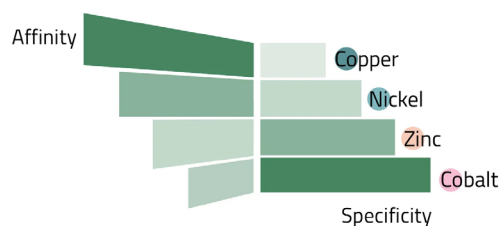
PureCube Ni-NTA MagBeads XL



Product	Catalog No.	Package size
PureCube Ni-NTA MagBeads XL (5 ml)	55305	1x 5 ml slurry (1.25 µl MagBeads)
PureCube Ni-NTA MagBeads XL (25 ml)	55325	1x 25 ml slurry (6.25 ml MagBeads)
PureCube Ni-NTA MagBeads XL (4 x 25 ml)	55325	4x 25 ml slurry (6.25 ml MagBeads)



Coupled metal ion



Product Description

PureCube Ni-NTA MagBeads XL 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 90 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 Ni²⁺/ml. Other possible metal ions are Co²⁺, Zn²⁺, Fe³⁺, Al³⁺, and Cu²⁺, 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 XL.

PureCube Ni-NTA MagBeads XL 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 ~40 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 XL 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	90 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	40 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: <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)