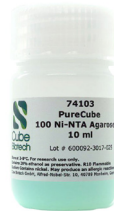
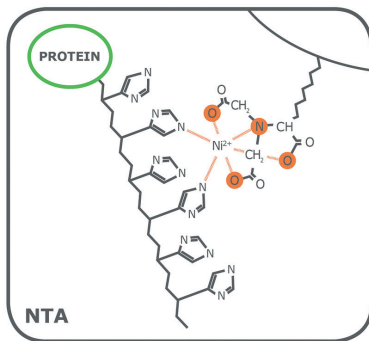


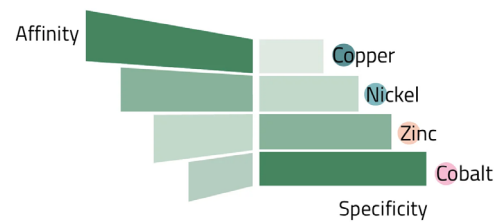
PureCube 100 Ni-NTA Agarose



Product	Catalog No.	Package size
PureCube 100 Ni-NTA Agarose (10 ml)	74103	20 ml (50% suspension)
PureCube 100 Ni-NTA Agarose (50 ml)	74105	100 ml (50% suspension)
PureCube 100 Ni-NTA Agarose (250ml)	74110	500 ml (50% suspension)



Coupled metal ion



Product Description

PureCube 100 Ni-NTA Agarose was developed for the affinity purification of proteins carrying a polyhistidine tag. This affinity chromatography matrix is based on 6% cross-linked agarose. The material is highly porous to allow for optimal protein interaction, with a size exclusion limit for globular proteins of 4×10^6 Da.

The PureCube 100 Agarose has excellent properties in batch and column purification, including purification processes under low pressure (FPLC). At 15 cm bed height, maximum flow rate is ≥ 1000 cm/h, and maximum pressure ≥ 300 kPa. PureCube 100 agarose beads have a particle diameter of 50-150 μm .

An NTA ligand is coupled to the agarose matrix and carefully loaded with nickel ions to obtain an affinity matrix with highest binding capacity for histidine residues. The metal ion capacity is 15 $\mu\text{eqv Ni}(2+)/\text{ml}$.

PureCube 100 Ni-NTA Agarose is delivered as a 50% (v/v) suspension so that 2 ml of suspension yield a 1 ml bed volume. The suspension contains 20% ethanol to prevent microbial growth.

Protein Binding Capacity

The protein binding capacity is up to 80 mg/mL, as determined by purification of 6xHis-tagged GFP protein from *E.coli* cleared lysates, and quantified via spectrophotometry. Proteins are eluted with high purity.

Compatibility

PureCube 100 Ni-NTA Agarose is very stable and can resist the following conditions in most situations: pH 3-13, 100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile, 10 mM DTT, 1 mM EDTA, 1 M NaOH.

Technical Details

Bead Ligand	Ni-NTA (nitrilotriacetic acid+ nickel ion)
Bead size	100 µm
Filling quantity	50% suspension. (e.g. 10 ml will be 10 ml pure beads +10 ml storage buffer)
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: <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.