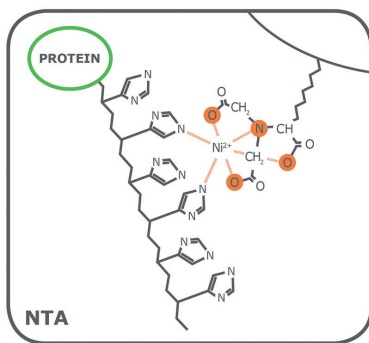


PureCube Ni-NTA Agarose XL



Product	Catalog No.	Package size
PureCube Ni-NTA Agarose XL (10 ml)	55103	20 ml (50% suspension)
PureCube Ni-NTA Agarose XL (50 ml)	55105	100 ml (50% suspension)
PureCube Ni-NTA Agarose XL (250 ml)	55110	500 ml (50% suspension)



Coupled metal ion



Product Description

PureCube Ni-NTA Agarose XL was developed for the affinity purification of proteins carrying a polyhistidine tag. This affinity chromatography matrix consists of particularly large agarose beads, which are used for special applications. The material consists of 6% cross-linked agarose, and is highly porous to allow for optimal protein interaction. This special agarose contains extra large particles with a medium diameter of 400 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 $> 25 \mu\text{eqv Ni}(2+)/\text{ml}$. Other possible metal ions are $\text{Co}(2+)$, $\text{Zn}(2+)$, $\text{Fe}(3+)$, and $\text{Al}(3+)$, resulting in different affinities, e.g. for zinc-finger proteins or phosphorylated proteins. If required, the nickel ions can be removed from the agarose matrix using 5 wash steps with 100 mM EDTA, and the matrix can be recharged with a different metal ion. Alternatively, please contact us for unloaded NTA agarose matrix with large agarose beads.

PureCube Ni-NTA Agarose XL is delivered as a 50% (v/v) suspension. Therefore, 2 ml suspension will yield a 1 ml bed volume. The suspension contains 20% ethanol to prevent microbial growth.

Protein Binding Capacity

The protein binding capacity is at least 20 mg/mL, as determined by purification of 6xHis-tagged GFP protein from E.coli cleared lysates, and quantified via spectrophotometry.

Compatibility

PureCube Ni-NTA Agarose XL is 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	400 µm
Filling quantity	50% suspension. (e.g. 10 ml will be 10 ml pure beads +10 ml storage buffer)
Binding capacity	20 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.

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