

## PureCube Co-NTA Agarose XL

Product	Catalog No.	Package size
PureCube Co-NTA Agarose XL (10 mL)	55403	20 mL of a 50% suspension
PureCube Co-NTA Agarose XL (50 mL)	55405	100 mL of a 50% suspension
PureCube Co-NTA Agarose XL (250 mL)	55410	500 mL of a 50% suspension
PureCube Co-NTA Agarose XL (500 mL)	55412	1000 mL of a 50% suspension

### Product Description

PureCube Co-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 µeqv Co<sup>2+</sup>/mL. Other possible metal ions are Ni<sup>2+</sup>, Zn<sup>2+</sup>, Fe<sup>3+</sup>, and Al<sup>3+</sup>, resulting in different affinities, e.g. for zinc-finger proteins or phosphorylated proteins. If required, the cobalt 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 Co-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 5 mg/mL resin, as determined by purification of 6xHis-tagged GFP protein from *E.coli* cleared lysates, and quantified via spectrophotometry.

### Compatibility

PureCube Co-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.

### Shipping & Storage

Shipment Temperature	Ambient temperature
Short-term Storage	In equilibration buffer (see protocol)
Long-term Storage	In 20% ethanol at 4 °C

## **Additional information**

For protein purification protocols, including protocols for regenerating Co-NTA Agarose resin, please visit our webpage at: [www.cube-biotech.com/protocols](http://www.cube-biotech.com/protocols). For purification of his-tagged proteins from dilute solutions, we recommend using PureCube Co-NTA MagBeads. For affinity purification of GST-tagged, rho-tagged or strep<sup>®</sup>-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 membrane proteins. See [www.cube-biotech.com/products](http://www.cube-biotech.com/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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**Proteins are our passion.**