

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 (250 mL)	74110	500 mL 50% suspension
PureCube 100 Ni-NTA Agarose (500 mL)	74112	1000 mL 50% suspension

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 novel 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 $\mu\text{eq Ni}^{2+}/\text{mL}$.

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.

Shipping & Storage

Shipment Temperature	Ambient temperature
Short-term Storage	In neutral buffer
Long-term Storage	In neutral buffer with 20% ethanol at 4 °C

Additional Information

For protein purification protocols, including protocols for regenerating Ni-NTA Agarose resin, please visit our webpage at: www.cube-biotech.com/protocols. For purification of his-tagged proteins from dilute solutions, we recommend using PureCube Ni-NTA MagBeads.

For affinity purification of GST-tagged, rho-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 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.

Trademarks: FPLC® is a trademark of GE Healthcare.

Proteins are our passion.