

PureCube NTA Agarose

Product	Catalog No.	Package size
PureCube NTA Agarose (10 mL)	31703	20 mL 50% suspension
PureCube NTA Agarose (50 mL)	31705	100 mL 50% suspension
PureCube NTA Agarose (250 mL)	31710	500 mL 50% suspension
PureCube NTA Agarose (500 mL)	31712	1000 mL 50% suspension

Product Description

PureCube NTA Agarose was developed for IMAC purification methods, e.g. the affinity purification of proteins carrying a polyhistidine tag. This affinity chromatography matrix is based on BioWorks Workbeads, consisting of 7.5% cross-linked agarose. The material is highly porous to allow for optimal protein interaction. Cross-linked agarose is also physically very stable, making it suitable for purification processes under low pressure with flow rates up to 6 mL/min (optimal 0.5 – 2 mL/min). Our agarose is very homogeneous in size with a medium particle diameter of 40 µm, yielding a high degree of reproducibility between individual purification runs.

An NTA ligand is coupled to the agarose matrix. It can be loaded with various metal ions, e.g. Ni²⁺, Co²⁺, Zn²⁺, Fe³⁺, and Al³⁺, resulting in different affinities, e.g. for his-tagged proteins, zinc-finger proteins or phosphorylated proteins. If required, the metal 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 NTA agarose matrices preloaded with different metals.

PureCube NTA Agarose 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 strongly depends on the metal loaded on the material, e.g. 70 mg/ml for Ni-NTA or 30 mg/ml for Co-NTA.

Compatibility

PureCube NTA Agarose 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 neutral buffer at 4°C
Long-term Storage	In neutral buffer with 20% ethanol at 4 °C

Additional Information

For protein purification protocols, including protocols for regenerating NTA Agarose resin, please visit our webpage at: www.cube-biotech.com/protocols. For IMAC-based purification of proteins from dilute solutions, we recommend using PureCube 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: Strep-tag[®] (IBA GmbH).

Proteins are our passion.