

## PureCube Zr-NTA MagBeads

Product	Catalog No.	Package size
PureCube Zr-NTA MagBeads (1 mL)	31501-Zr	1 x 1 mL
PureCube Zr-NTA MagBeads (5 mL)	31505-Zr	1 x 5 mL
PureCube Zr-NTA MagBeads (25 mL)	31525-Zr	1 x 25 mL
PureCube Zr-NTA MagBeads (4 x 25 mL)	31590-Zr	4 x 25 mL

### Product Description

PureCube Zr-NTA MagBeads were developed for the enrichment of phosphorylated proteins. The affinity matrix is based on spherical magnetic agarose beads, consisting of 6% cross-linked agarose. The material is highly porous to allow optimal protein interaction. Cross-linked agarose is also physically very stable, making it suitable for purification processes without deformation or destruction. Our magnetic beads are very homogeneous in size with a medium particle diameter of 30 µm, yielding a high degree of reproducibility between individual purification runs.

An NTA ligand is coupled to the agarose and carefully loaded with zirconium ions to obtain a matrix with highest binding capacity. The metal ion capacity is > 15 µeq/mL. Other possible metal ions are Ni<sup>2+</sup>, Zn<sup>2+</sup>, Al<sup>3+</sup>, Co<sup>2+</sup>, Fe<sup>3+</sup>, Ti<sup>4+</sup> and Cu<sup>2+</sup> resulting in different affinities, e.g. for zinc-finger proteins or his-tagged proteins. If required, the iron ions can be removed from the magnetic beads using 5 wash steps with 100 mM EDTA, and the magnetic beads can be recharged with a different metal ion. Alternatively, please contact us for unloaded PureCube NTA magnetic beads.

PureCube Zr-NTA MagBeads are delivered as a 25% suspension. Therefore, 1 mL suspension will yield a 250 µL bed volume. The suspension contains 20% ethanol to prevent microbial growth.

### Protein Binding Capacity

The protein binding capacity varies and depends on the specific application.

### Compatibility

PureCube Zr-NTA MagBeads are very stable and can resist the following conditions in most situations: pH 2-4, 100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile.

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## 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, please visit our webpage at: [www.cube-biotech.com/protocols](http://www.cube-biotech.com/protocols). For purification of proteins with gravity flow columns and low pressure chromatography, we recommend using PureCube Zr-NTA Agarose. 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 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.

Trademarks: Strep-tag<sup>®</sup> (IBA GmbH).