Cambio Ni-IDA MagBeads

Product	Catalog No.	Package size
Cambio Ni-IDA MagBeads (1 mL)	**CA-211407**	**1 x 1 mL**
Cambio Ni-IDA MagBeads (5 mL)	**CA-211435**	**1 x 5 mL**
Cambio Ni-IDA MagBeads (25 mL)	**CA-211575**	**1 x 25 mL**
Cambio Ni-IDA MagBeads (4 x 25 mL)	**CA-212030**	**4 x 25 mL**

Product Description

Cambio Ni-IDA MagBeads were developed for the affinity purification of proteins carrying a polyhistidine tag. 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 IDA ligand is coupled to the agarose, and carefully loaded with nickel ions to obtain a matrix with highest binding capacity for histidine residues. The metal ion capacity is > 15 µeqv Ni^{2+}/mL. Other possible metal ions are Co^{2+}, Zn^{2+}, Fe^{3+}, Al^{3+}, and Cu^{2+}, resulting in different affinities, e.g. for zinc-finger proteins or phosphorylated proteins. If required, the nickel 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, unloaded Cambio IDA magnetic beads are available.

Cambio Ni-IDA 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 is 40 mg protein per mL settled beads, as determined by purification of 6xHis-tagged GFP protein from *E.coli* cleared lysates, and quantified via spectrophotometry.

Compatibility

Cambio Ni-IDA 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.

Shipping & Storage

Shipment Temperature	Ambient temperature
Short-term Storage	In buffer at 4°C
Long-term Storage	In buffer containing 20% ethanol at 4 °C. **Do not freeze!**

Additional Information

For purification of his-tagged proteins with gravity flow columns and low pressure chromatography, we recommend using Cambio Ni-IDA Agarose. For affinity purification of GST-tagged, rho-tagged or strep®-tagged proteins, Cambio offers dedicated agarose resins, magnetic beads and prepacked cartridges are available from Cambio. Also available are a range of ultrapure detergents and buffers for extraction and purification of proteins. See http://www.cambio.co.uk/ for details.