HighSpec Ni-NTA Agarose XL

#Cat: NB-40-00008-10ml	**Size: 10ml**
#Cat: NB-40-00008-50ml	**Size: 50ml**
#Cat: NB-40-00008-250ml	**Size: 250ml**
#Cat: NB-40-00008-500ml	**Size: 500ml**

Product Description :

HighSpec Ni-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 Ni^{2+}/mL. Other possible metal ions are Co^{2+}, Zn^{2+}, Fe^{3+}, and Al^{3+}, resulting in different affinities, e.g. for zinc- finger proteins or phosphorylated proteins. If required, the nickel 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.

HighSpec Ni-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 20 mg/mL, as determined by purification of 6xHis-tagged GFP protein from E.coli cleared lysates, and quantified via spectrophotometry.

Compatibility :

HighSpec Ni-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 Neutral Buffer At 4°C
Long-term Storage	In Neutral Buffer With 20% Ethanol At 4°C