

## HighSpec 100 Ni-NTA Agarose

#Cat: NB-40-00001-1ml	Size: 1ml
#Cat: NB-40-00001-10ml	Size: 10ml
#Cat: NB-40-00001-50ml	Size: 50ml
#Cat: NB-40-00001-250ml	Size: 250ml
#Cat: NB-40-00001-500ml	Size: 500ml
#Cat: NB-40-00001-1000ml	Size: 1000ml
#Cat: NB-40-00001-5000ml	Size: 5000ml

### Product Description :

HighSpec 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  $4 \times 10^6$  Da.

The novel HighSpec 100 Ni-NTA 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  $\geq 1000$  cm/h, and maximum pressure  $\geq 300$  kPa.

HighSpec 100 Ni-NTA Agarose beads have a particle diameter of 50- 150  $\mu\text{m}$ . 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  $\mu\text{eqv Ni}^{2+}/\text{mL}$ .

HighSpec 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 :

HighSpec 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 :**

<b>Shipment Temperature</b>	Ambient Temperature
<b>Short-term Storage</b>	In Neutral Buffer
<b>Long-term Storage</b>	In Neutral Buffer with 20% Ethanol at 4°C