



## Super Cobalt NTA Affinity Resin Datasheet

Super Cobalt NTA Affinity Resin designed for affinity purification of polyhistidine tagged proteins. Cobalt ions are carefully loaded onto a 7.5% cross-linked agarose matrix (medium particle diameter 40  $\mu\text{m}$ ) via a NTA coupled ligand to obtain a stable affinity matrix with the highest binding capacity for histidine residues (up to 10 mg/ml determined from *E.coli* cleared lysate). Other metal ions such as  $\text{Ni}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Fe}^{3+}$ , and  $\text{Al}^{3+}$  can also be used resulting in different affinities. If required, the cobalt ions can be removed from the agarose matrix using 5 wash steps with 100 mM EDTA, and the matrix recharged with a different metal ion.

### Specification:

Specificity:	Polyhistidine tag
Matrix:	7.5% cross linked agarose
Coupled ligand:	Nitrilotriacetic acid (NTA)
Binding capacity:	30 mg/ml
Bead size:	32-60 $\mu\text{m}$ (40 $\mu\text{m}$ medium)
Flow rate:	0.25-1 ml/min (optimum), 6 ml/min (max)
Maximum pressure:	72 psi
Buffer compatibility:	Common aqueous buffers from pH 2-14
Cleaning buffer examples:	100% methanol, 100% ethanol, 8 M urea, 6 M guanidinium hydrochloride, 30% (v/v) acetonitrile
Shipping/delivery:	50% (v/v) resin suspension in 20% Ethanol at ambient temperature
Storage:	Equilibration buffer (short-term) 20% ethanol at 2-8°C (long-term)

### Ordering Information:

Product	Volume	Order Code
Super Cobalt NTA Affinity Resin (1 ml)	1 ml	Super-CoNTA1
Super Cobalt NTA Affinity Resin (10 ml)	10 ml	Super-CoNTA10
Super Cobalt NTA Affinity Resin (25 ml)	25 ml	Super-CoNTA25
Super Cobalt NTA Affinity Resin (100 ml)	100 ml	Super-CoNTA100

### Protein Ark Limited

Telephone +44 (0) 33 33 44 20 25  
FAX: +44 (0) 33 33 44 20 25  
Email: [info@proteinark.com](mailto:info@proteinark.com)

