

## ReadiPrep™ Nickel NTA Magnetic Beads

Catalog Number: 56000, 56001

Unit Size: 1 mL, 5 mL

### Product Details

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Storage Conditions	Refrigerated (2-8 °C)
Expiration Date	12 months upon receiving

### Chemical Properties

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Appearance	Liquid
Molecular Weight	N/A
Soluble In	N/A

### Spectral Properties

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Excitation Wavelength	N/A
Emission Wavelength	N/A

### Applications

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ReadiPrep™ Nickel NTA Magnetic Beads provide a fast and simple solution for small-scale affinity purification of histidine-tagged proteins. These beads consist of magnetic resin functionalized with the nitrilotriacetic acid (NTA) moiety and charged with divalent nickel ions (Ni<sup>2+</sup>), which allow for purification under both native and denaturing conditions. The magnetic properties of these beads streamline the purification process, requiring only a magnetic device for the washing, binding, and elution steps, eliminating the need for pipetting or centrifugation. The NTA moiety is covalently attached via stable ether linkages through a spacer arm, making NTA a tetravalent chelating agent. This configuration provides enhanced specificity and reduced ion leaching compared to resins linked with iminodiacetic acid (IDA). ReadiPrep™ Nickel NTA Magnetic Beads also exhibit increased resilience in the presence of elevated EDTA concentrations, though higher imidazole concentrations may be needed for protein elution. The Nickel NTA Magnetic Beads are supplied as a 5% suspension in 20% ethanol, with each milliliter of suspension containing 50 µl of magnetic beads. The beads have a loading capacity of over 20 µmol Ni<sup>2+</sup> per milliliter of gel and a binding capacity exceeding 75 mg of His-tagged protein per milliliter of gel.