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Protocol for Ni-IDA/ Ni-NTA Agarose

for purification of His-tagged Proteins

Product	Cat#	Package size
Ni-IDA Agarose 20mL 50% suspension	S5353.0010	10mL
Ni-IDA Agarose 100mL 50% suspension	S5353.0050	50mL
Ni-IDA Agarose 500mL 50% suspension	S5353.0250	250mL
Ni-NTA Agarose 20mL 50% suspension	S5377.0010	10mL
Ni-NTA Agarose 100mL 50% suspension	S5377.0050	50mL
Ni-NTA Agarose 500mL 50% suspension	S5377.0250	250mL

All volume specifiation relating to the sedimented agarose resin.

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1. Overview

The polyhistidine tag is the most widely used affinity tag due to its small size, low immunogenicity, and versatility under native and denaturing conditions, as well as in presence of detergents and many other additives. Taking advantage of the affinity of transition metal ions for the imidazole ring of histidine, immobilized metal affinity chromatography (IMAC) is used to purify his-tagged proteins. Genaxxon offers high-performance IDA Agarose and NTA Agarose, both based on BioWorks Workbeads.

1.1 Specifications

particle size	32-60µm
pH stability	3.0-12.0
recommended flow rate	0.5-2.0mL/min. (6.0mL/min. possible)
formulation	unbuffered suspension in 20% ethanol
binding*-/loading capacity Genaxxon Ni-IDA agarose	50mg of the His-tagged protein/mL agarose
binding*-/loading capacity Genaxxon Ni-NTA agarose	up to 70mg of the His-tagged protein/mL agarose
antimicrobial agent	20% ethanol
stability	2 years
storage	2°C - 8°C, do not freeze!

*As determined by purification of 6xHis-tagged GFP protein from E.coli cleared lysates and quantified via spectrophotometry.

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