Ni-IDA Resin

Catalogue No.:abx098109

Ni-IDA Resin allows rapid affinity purification of His-tagged proteins. His-tagged proteins bind to Ni^{2+} cations, which are immobilized on the Ni-IDA resin by 3 metal-chelating sites. After unbound proteins are washed away, the target proteins are recovered by gradient elution. It is suitable for both native and denatured protein purification.

Specifications:

- Resin: Cross-linked 6% agarose
- Ligand: IDA
- Shape: Sphere
- Pore Size: 90 μm
- Binding Capacity: 20-40 mg/ml wet gel
- Recommended Flow Rate: < 300 cm/h
- Highest Resisistance of Atmospheric Pressure: 0.3 MPa
- pH Stability: 2-14

Target:	Ni-IDA Resin
Storage:	Store at 2-8 °C (with 20% ethanol) for up to 2 years.
Buffer:	Note: Buffers are not included with this product. Equilibration Buffer for soluble proteins: 50 mM sodium phosphate buffer, 300 mM NaCl, 10 mM imidazole, 10 mM Tris-HCl, pH 8.0. Equilibration Buffer for inclusion bodies: 100 mM sodium phosphate buffer, 6 M GuHCl, 10 mM Tris-HCl, pH 8.0; or 100 mM sodium phosphate buffer, 8 M urea, 10 mM Tris-HCl, pH 8.0.
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

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Directions for use:

Preparing the Ni-IDA purification column:

1. Thoroughly resuspend the Ni-IDA resin to achieve a homogeneous suspension of the resin in 20% ethanol storage buffer.
2. Immediately transfer the resin into a purification column. Ensure that the bottom of the column is plugged with a stopper. Close the value of the column and allow the resin to settle.
3. Equilibrate the column with 5-10 bed volume of equilibration buffer.

Preparing samples:

To avoid blocking the column, samples should be centrifuged and filtered through a 0.45 µm filter before loading.

Loading samples and washing:

Load samples and wash with 5-10 bed volume of equilibration buffer, and collect the flow-through in a tube

Elute:

Elute proteins with imidazole or low pH buffer.

Regeneration of Ni-IDA resin:

1. Wash the column/resin with:
    1. 2 bed volume of 6 M GuHCl, 0.2 M acetic acid.
    2. 5 bed volume of deionised water.
    3. 3 bed volume of 2% SDS.
    4. 1 bed volume of 25% ethanol.
    5. 1 bed volume of 50% ethanol.
    6. 1 bed volume of 75% ethanol.
    7. 5 bed volume of 100% ethanol.
    8. 1 bed volume of 75% ethanol.
    9. 1 bed volume of 50% ethanol.
    10. 1 bed volume of 25% ethanol.
    11. 1 bed volume of deionised water.
    12. 5 bed volume of 100 mM EDTA, pH 8.0.
    13. 10 bed volume of deionised water.
    14. 5 bed volume of 100 mM $NiSO_4$.
2. Store the column/resin in 20% ethanol.

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