

Sartobind[®] IDA Lab

Laboratory Scale
Membrane Adsorbers
for Metal Affinity Purification



Product Information

The use of an iminodiacetic acid membrane allows purification of proteins via metal ion complex formation. You may load the metal ion best suited for your application onto the membrane matrix. Sartobind[®] IDA Lab provides much higher flow rates than conventional IDA resins. It can be operated with a syringe or connected to a liquid chromatography system, via UNF 10-32 adapters.

Benefits

- Optimize your affinity purification for purity and yield, using the metal ion of your choice
- Higher flow rates compared with IDA resins
- Fast and convenient operation by syringe
- Compatible with peristaltic pumps or liquid chromatography systems

Technical Data

Description	Sartobind® IDA Lab
Order number	93IDA-42DB-12--V
Quantity	2
Membrane material	Stabilized reinforced cellulose
Pore size	> 3 µm
Number of layers	15
Bed height	4 mm
Bed volume	2.1 mL
Adsorption area	75 cm ²
Ligand coupling method	Iminodiacetic acid (IDA)
Binding capacity for equine heart cytochrome c	> 3 mg/unit
Binding capacity for His ₆ -tagged protein*	7.5 mg/unit
Recommended ions for coupling	Ni ²⁺ , Co ²⁺ , Cu ²⁺ or Zn ²⁺
Flow rate at 0.1 MPa (1 bar, 14.5 psi)	> 10 mL/min
Maximum pressure	0.6 MPa (6 bar, 87 psi)
Housing material	Polysulfone
Chemical stability	Stable in all common chromatography buffers except peroxide and other oxidizing or reactive reagents

* Protected by patents of third parties



1 2 3 4 5

Purification of *E. coli* BL21 (DE3) pET-bgl-His₆-sec**

Lane 1: Culture supernatant after filtration, concentrated

Lane 2: Flow-through, concentrated

Lane 3: Wash fraction

Lane 4: Eluate 1

Lane 5: Eluate 2

Description	Sartobind® IDA Lab
Loading buffer	0.5 M CuSO ₄
Sample	Supernatant of sonicated <i>E. coli</i> BL21 (DE3) pET-bgl-His ₆ -sec prefiltered with 0.2 µm filter
Washing buffer	50 mM NaH ₂ PO ₄ , 300 mM NaCl, 20 mM imidazole, pH 8.0
Elution buffer	50 mM NaH ₂ PO ₄ , 300 mM NaCl, 250 mM imidazole, pH 8.0
Flow	10 mL/min
Protein eluted	5.9 mg

** Purification of His₆-tagged proteins, Sartobind® Application note SL-4037-e

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