



# PROTEUS

## Recombinant Protein Purification

REFINE the way you purify your proteins

REPLACE your conventional spin columns

REDUCE your hands-on time and costs



MINI

MIDI

Proteus Metal Chelate Mini and Midi kits are designed for simple, complete and rapid 6xHis-tagged recombinant protein purification from bacterial cells, insect vectors, mammalian cells and yeast under native or denaturing conditions.

Proteus purification kits incorporate patented, single step and affinity spin columns, clear and unambiguous procedures, desalting/buffer exchange columns and ready-to-use buffers.

Proteus Metal Chelate kits are ideal for screening expression clones for high levels of 6xHis-tagged proteins, scouting mutant clones for recombinant protein expression and multiple small-scale and preparative purification of 6xHis-tagged proteins for activity and structural studies.

### Rapid

- The purification protocols provided in the operating handbook permit fast recovery of pure recombinant protein.
- Multiple samples can be processed at the same time, allowing rapid screening for 6xHis-tagged proteins.
- No hold-up volume or spluttering. High recovery during the fast elution step.

### Cost-effective

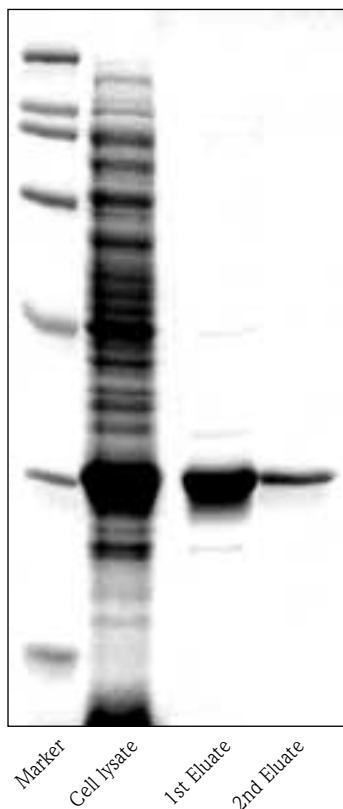
- Proteus spin columns can be used by any laboratory with access to a centrifuge.
- The Proteus columns are re-usable. Each Mini spin column can be used up to a minimum of 2 times and each Midi spin column can be used up to a minimum of 2 times without nickel re-charging.
- As research budgets are always under pressure, Proteus kits offer a cost-effective alternative.

### Performance

- Proteus chromatography spin columns will typically bind the target recombinant protein with greater than 90% recovery.
- Proteus spin columns can purify and concentrate the protein of interest in a single step and with high reproducibility (low % CV).
- Proteins are sufficiently pure for structural and activity-based studies or for raising antibodies.

### IMAC PERFORMANCE

SDS-polyacrylamide gel showing the purity of a 6xHis-tagged recombinant protein from *E. coli*.



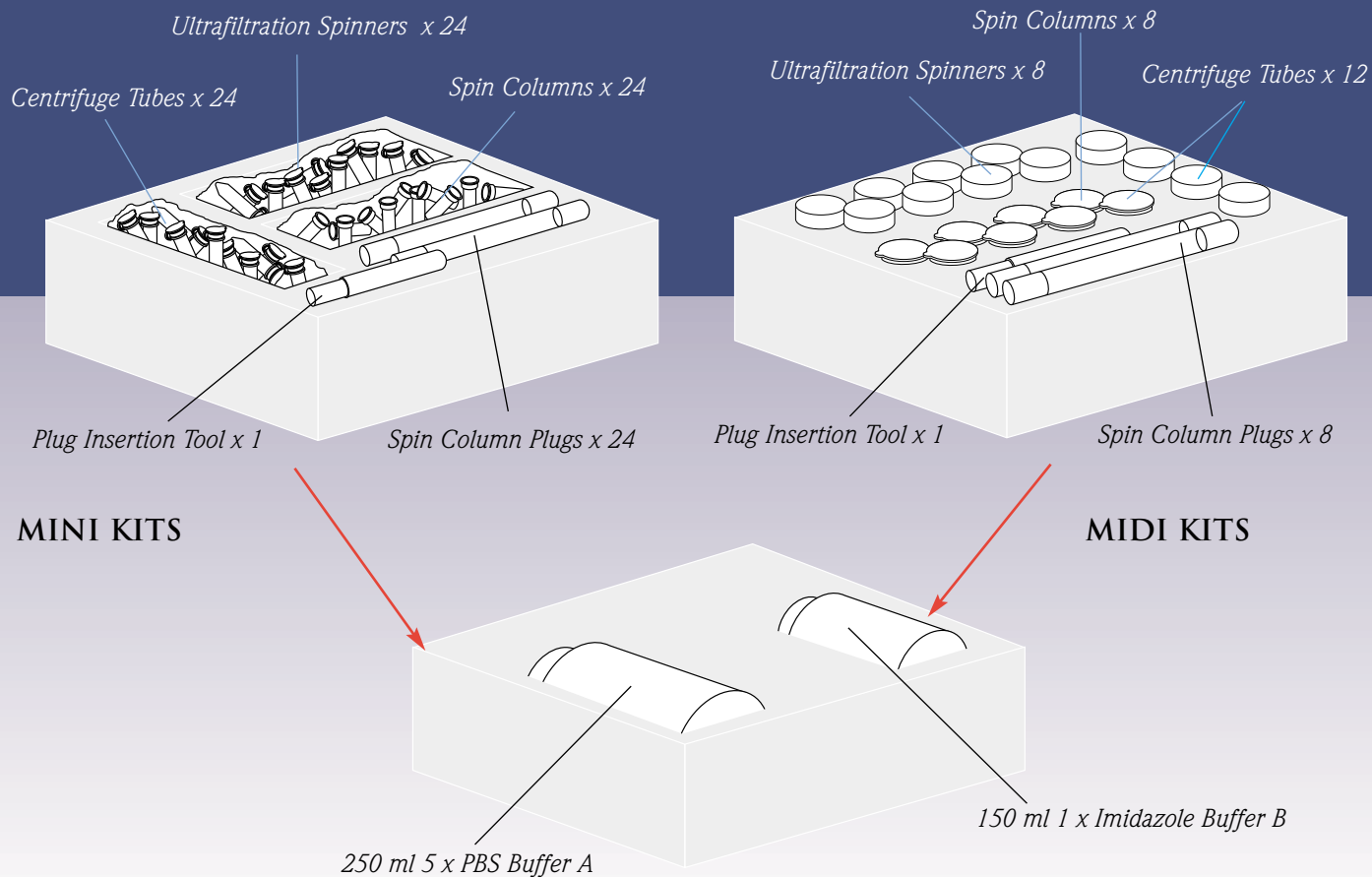
### Convenient & easy-to-use

- Simply insert the pre-packed chromatography resin plug into the device and place it in the centrifuge.
- No mess, no filling columns, no attachment of accessories, no pumps and no lengthy equilibration.
- Kits are supplied with a comprehensive technical and application-supported handbook, a step-wise laminated protocol card and all necessary buffers for rapid and simple recombinant protein purification.

### IMAC SPECIFICATIONS

Kit	MINI	MIDI
Max. sample volume per load	0.65 ml, fixed angle rotor	20 ml, swing bucket rotor
Charged metal ion	Ni <sup>2+</sup>	Ni <sup>2+</sup>
Typical binding capacity per use	1 mg 6xHis-tagged protein	10 mg 6xHis-tagged protein
Min. number of uses per plug	2 (assuming no further Ni <sup>2+</sup> charging)	2 (assuming no further Ni <sup>2+</sup> charging)
Supporting Proteus matrix	Covalently coupled to agarose resin	Covalently coupled to agarose resin
Resin bed volume	0.23 ml	1.6 ml
Bead size range	45-165 μm	45-165 μm
Storage temp. for resin plugs	2-8 °C	2-8 °C
Recommended working pH	pH 2.0-12.0	pH 2.0-12.0
Chemical stability	High	High
Plastic construction	Polypropylene	Polypropylene
Time to purity	15 min	48 min
Color coded end-caps	Black	Black

# PROTEUS KIT CONTENTS



## APPLICATION DRIVERS FOR METAL CHELATE CHROMATOGRAPHY

Purification of recombinant proteins for activity and/or structural studies	Mini & Midi Kits
Purification of recombinant proteins for raising antibodies	Mini & Midi Kits
Multiple and parallel semi-preparative purification of 6xHis-tagged proteins	Midi Kit
Small-scale purification of 6xHis-tagged proteins	Mini Kit
Screening expression clones for high levels of 6xHis-tagged proteins	Mini Kit
Scouting mutant clones for recombinant protein expression	Mini Kit

## ORDERING INFORMATION

Mini Products	Quantity	Min. number of purifications	Order codes
Mini IMAC Starter Kit (8 units)	1	16	PC-MMCK-08
Mini IMAC Kit (24 units)	1	48	PC-MMCK-24
Mini IMAC Pack (24 units; excludes UF concentrators)	1	48	PC-MMCC-24
Mini IMAC Bulk Pack (72 units; excludes UF concentrators and buffers)	1	144	PC-MMCC-72
Midi Products			
Midi IMAC Kit (8 units)	1	16	PC-MCK-08
Midi IMAC Pack (8 units; excludes UF concentrators)	1	16	PC-MCC-08
Midi IMAC Bulk Pack (24 units; excludes UF concentrators and buffers)	1	48	PC-MCC-24
Accessories			
IMAC Buffer Pack (250 ml 5 x PBS Buffer A, 150 ml 1 x Imidazole Buffer B)	1	-	PC-BMCP