LYTRAP SPIN COLUMNS

(Cat. No. RS-3319, RS-3320 and RS-3321)

For research use only.

1. About BIOMEDAL LYTAG System.

LYTAG system is a new generation of products designed for the expression and purification of proteins in *E. coli*. The new system is based on a reduced version of the affinity chromatography purification tag C-LYTAG. LYTAG has shorted amino acid sequence (136 aa, 15.21 KDa) than C-LYTAG.

LYTAG, as well as C-LYTAG, specically interacts with LYTRAP resin, a simple, afficient and low cost ahromatograpic support.

The new **LYTAG** incorporates an alpha helix polypeptidic sequence which acts as a spacing element between LYTAG and the fused protein, reducing the potencial steric interference between both regions and facilitating elimination of the tag by enterokinase digestion.

2. Description.

PRODUCT	CAT.No.	FORMAT
LYTRAP Spin Columns (0.5 ml)	RS-3319	10
LYTRAP Spin Columns (0.5 ml)	RS-3320	25
C-LYTRAP Spin Columns (0.5 ml)	RS-3321	100

3. Characteristics of LYTRAP Spin Columns.

LYTRAP Spin Columns are microcentrifugue columns containing LYTRAP resin that permits a rapid and inexpensive batch alternative to gravity- or pressure-based chromatographic methods. LYTRAP Spin Columns fit into standard microcentrifugue tubes for use in a fixed-angle rotor microcentrifugue. LYTRAP resin is supplied pre-swollen in 20% ethanol.

Important Product information

a. Place the LYTRAP Spin Column into standard microcentrifugue tubes for resin equilibration, sample processing and sample collection.

b. Twist off bottom tip of LYTRAP Spin Column before centrifugation.

c. Do not snap off bottom. To remove, twist slightly in one direction followed by the other direction. If required, forceps may be used to aid in tip removal.

d. Recommended centrifugue speed: 700 x g

e. Loosen the screw cap one-quarter turn before centrifugation.

4. General Protocol.

1. Centrifuge the LYTRAP Spin Column at 700 x g for 2 min.
2. Add 300 µl of column equilibration buffer and carefully resuspend the resin pipetting up and down. Centrifuge at 700 x g for 2 min.
3. Repeat step 2 three times.
4. Add 300 µl of bacterial lysate into the column and carefully resuspend the resin pipetting up and down. Incubate 10 min at RT.
5. Centrifuge at 700 x g for 2 min.
6. Add 300 µl of washing buffer, resuspend and centrifuge at 700 x g for 2 min.
7. Repeat step 6 at least four times.
8. Add 300 µl of re-equilibrating buffer, resuspend and centrifuge at 700 x g for 2 min.
9. Repeat step 8 three times.
10. Place the LYTRAP Spin Column into a new standard microcentrifuge tube.
11. Add 300 µl of elution buffer, resuspend and incubate 10 min at RT.
12. Centrifuge at 700 x g for 2 min.
13. The LYTAG fusion protein must be in the eluted fraction. By repeating the elution step, the yield of protein could increase.

5. Characteristics of LYTRAP Resin.

Binding capacity	0.5-3 mg/ml
Bead structure	6% highly cross-linked agarose
Bead size	45-165 m
Recommended flow rate	1 ml/min
pH stability (<2 h)	1-14
pH stability (> 2 h)	3-12
Antimicrobial agent	Ethanol 20%
Storage	4°C for long time periods

6. Related products.

Product	Format	Cat.No.
LYTRAP resin	30 ml	RS-3302
LYTRAP resin	250 ml	RS-3316
LYTRAP spin columns	10 units	RS-3319
LYTRAP spin columns	25 units	RS-3320
LYTRAP spin columns	100 units	RS-3321
Purification columns 2.5ml (empty)	5 units	RS-3444
LYTAG Purification System	1kit (5 purifications)	RS-3246

For more information,
please visit our WEBSITE
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