

LYTAG Two Phase Purification System

Metal ion-free purification of recombinant proteins fused to Lytag by aqueous Two Phase Separation System

Description

LYTAG Two-Phase is a protein purification system based on the use of two aqueous components. The method relies on the affinity of the protein tag LYTAG for one of the two-phase components, allowing recombinant protein separation and purification from cellular extracts or culture media. In the procedure, the LYTAG-fused protein is retained in one of the aqueous phases while most of the undesired proteins can be removed by simply discarding the opposite phase. After replenishing the system with fresh phase, the protein of interest can be easily recovered in it, with high purity, by reversing its localization with the addition of choline, the specific LYTAG ligand.

This system is particularly well suited for biotech industry and research laboratories specialized in protein separation and purification. as it is simple, cost efficient, time saving and highly versatile for scaling up protein purification process, representing a convenient alternative to solid resins.

Applications

This system is particularly well suited for the biotech industry and research laboratories specialized in protein separation and purification. It is an easy and rapid, cost-efficient, time-saving and highly versatile for scaling up purification processes of recombinant LYTAG fusion proteins, representing a convenient alternative to solid resins.

Advantages

- Quick method, separation can be completed within a few minutes, minimizing the effects of proteases. It is especially convenient when large volumens (>10 ml) of cellular extracts or culture media need to be processed (usually requiring prolonged flow times when using chromatography columns).

Licensing Opportunity

- Easy-to-handle and inexpensive protein purification process.
- Scalable method.
- No special equipment required.
- Mild conditions at low temperatures for the separation of labile proteins.
- High purification efficiency (>95% purity), comparable to the use of solid matrices.
- Optimum performance in downstream purification processes.
- Ideal alternative to conventional solid resins.

Development Stage

The method is ready-to-market and samples are available.

Patent Situation

Titel: Methods for separating recombinant proteins in aqueous two phase systems

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Technology Offer

Biomedal offers an exclusive license to interested companies.

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