Immobilized Streptavidin Protocol and Product Information Sheet

Product Category: Immobilization Resins
Catalog Number(s): g4108-5ml
Product Name: Immobilized Streptavidin

Immobilized Streptavidin

Immobilized Streptavidin 5 ml (g4108-5ml) of settled gel is supplied as 50% slurry in buffer containing 0.02% sodium azide as a preservative.

Gel Support: Cross-linked 6% beaded agarose.

Storage**:** Upon receipt store at 4°C. Product is shipped at ambient temperature.

Procedure for Purification of Biotinylated Proteins by Gravity Flow Column

Note: The following protocol must be optimized for each specific application.

Required Materials:

- Use ~3mg biotinylated protein per ml of settled Immobilized Streptavidin resin
- Phosphate-buffered Saline (100mM Sodium Phosphate, 150mM Sodium Chloride; pH 7.2)
- 8M Guanidine-HCl, pH 1.5 elution buffer
- Disposable Polystyrene Columns

1. Allow Immobilized Streptavidin to reach room temperature (~25°C) and pack the column with the resin. Drain the storage buffer to the top of the resin bed. **Caution:** Do not allow resin bed to dry or crack.
2. Wash the packed column with 3-5 column volumes of Phosphate-buffered Saline.
3. Add the biotinylated sample to the Immobilized Streptavidin column, allowing the sample to enter the resin.
4. Replace the column's bottom cap followed by the top cap. Incubate column at room temperature for 10-15 minutes.
5. Use ~10 column volumes of Phosphate-buffered Saline to wash the column.
6. Use ~10 column volumes of 8M Guanidine-HCl, pH 1.5 elution buffer to elute the bound biotinylated sample. Save the eluate in 500µl to 1ml fractions. Measure the protein content of each fraction by assaying the absorbance at 280 nm.
7. Dialyze or desalt the eluted fractions of interest right away. Protein precipitation can occur by sudden pH change. Slowly neutralizing the fractions by adding a high-ionic strength alkaline buffer (i.e. 100mM Tris, pH 9.0) can help minimize precipitation.

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