

ReductEtox binds endotoxin with high affinity without significant trapping of macromolecules. Recovery of protein is very high, while endotoxin levels are greatly reduced. ReductEtox is stable when depyrogenated with 1N NaOH for 2 hours at 37°C or overnight at room temperature.

Precautions:

1. Use only endotoxin-free water and buffers.
2. Use aseptic technique. Work in a laminar flow (tissue culture) hood and wash surfaces with 70% Ethanol. All tubing and pumps that come in contact with the product should be sanitized with 70% Ethanol or 1N NaOH and rinsed with endotoxin-free water.

Protocol

1. Wash ReductEtox with ten bed volumes of 1N NaOH and allow the resin to stand in 1N NaOH for two hours at 37°C or overnight at room temperature. Wash to neutral pH with pyrogen-free water. Filter the sample* with a 0.2 µm filter to remove any microorganisms that may contaminate the sample and produce additional endotoxin.
2. Depyrogenate your sample using ReductEtox. The reaction between the resin and endotoxin is not instantaneous. If working in batch mode, a 20 minute incubation time is recommended; if running through a column, run at a maximum of 200 cm/hr and recirculate the sample for 20 minutes. Contact times and circulation rates may need to be optimized.
3. To regenerate the resin, wash ReductEtox with ten bed volumes of 1N NaOH and allow the resin to stand in 1N NaOH for two hours at 37°C or overnight at room temperature. Wash with pyrogen-free water to neutral pH.
4. Store the sanitized ReductEtox in sterile, pyrogen-free water containing 20% ethanol at 2-8°C.

*When there are strong ionic interactions between protein samples and the charged residues on the inner core of the LPS molecule, it becomes necessary to raise the ionic strength of the sample, in some cases to 1M NaCl, to minimize this attraction. In these cases equilibrate the column with sterile, pyrogen-free 1M NaCl.

For technical service, email info@sterogene.com or call (760) 929-0455.