

Thermo

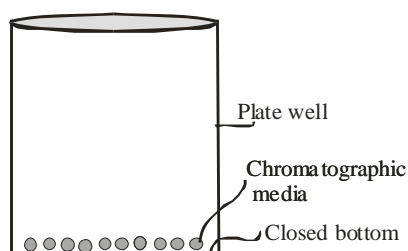
SCIENTIFIC

HyperSep™ Lab Plate Instructions for Strong Cation Exchanger (SCX)

Polystyrene Plate Part Number: 60110-208 (SCX)

Polypropylene Plate Part Number: 60110-308 (SCX)

INTRODUCTION: HyperSep Lab Plate is a device for the purification and sample preparation of proteins, peptides, DNA, RNA and other biomolecules. The chromatographic media is embedded at the bottom of the plate. The plates are ideal for the sample preparation of a few micrograms of proteins and peptides and typically have a higher binding capacity than conventional ELISA-type plates. The binding capacity of a 96-well HyperSep Lab Plate is 2 μ g for a sample volume of 25-200 μ L



Chromatographic media coated at the bottom of the plate

Recommended Solvents

Volatile Solvents:

Binding solution: 10mM ammonium formate, pH 2.7-3.0, with 20% acetonitrile OR 0.1% formic acid with 20% acetonitrile

Releasing solution: 5% ammonium hydroxide with 30% methanol OR 0.4M ammonium formate, pH 5.0 with 20% acetonitrile (optional if sample contains no detergent and is to be injected directly onto a reversed-phase column or capillary)

Non-volatile Solvents (transparent at 215nm)

Binding solution: 5mM sodium or potassium phosphate, pH 2.7-3.0, with 20% acetonitrile

Releasing solution: 5mM sodium or potassium phosphate and 0.5M KCl, pH 6.0, with 20% acetonitrile (optional if sample is to be injected directly onto a reversed phase column or capillary).

Conditioning Procedure

Aspirate/expel 10-200 μ L of the appropriate binding solution 5 times

Sample Binding

1. Wash with the binding solution 3 times according to application
2. Aspirate/expel the sample (10-50 μ L) 30-50 times to allow the sample to adsorb to the SCX material.

Sample Washing

Aspirate/expel 20-50 μ L volumes of the binding solution 10 times, discarding the expelled solution each time. This will eliminate salts, lipids & detergents.

Sample Release

Aspirate/expel 10-80 μ L of releasing solution 10 times, collecting the expelled solution in a suitable clean tube or plate. Repeat with a fresh portion of releasing solution if you want to release and collect all of the adsorbed protein or peptide. Evaporate the solvent or proceed directly to the next analysis.

NOTE: Take care not to pierce the membrane when loading samples.