Preciex™ Instructions for:

Peptide Cleanup tips

APPLICATIONS: The Preciex Cleanup tip uses a proprietary mixed-bed Resin to clean peptide mixtures, specialize in high peptides recovery and efficiently removing detergents, polymers, salts, lipid and more for reliable LC-MS analyses. For detergents such as CHAPS, Igepal, SDC, SDS, Triton X-100 and the polymer PEG-10k the tip removed >99.5% of the contamination; for Tween-20, the removal efficiency was >85%, due to the high repeat numbers of polytheylene glycol.

Conditioning procedure

a) Via a pipette tip inserted in the top of the Tip, add 20ul of Conditioning buffer(i) in order to wet the packing material. Centrifuge 2,000 g for 120 seconds.
b) Add 20ul of Equilibrating buffer(ii), centrifuge 2,000 g for 60 seconds to force the solution through the packed bed, repeat this procedure 2x.

Suitable solutions are:

i. Conditioning Buffer: isopropanol
ii. Equilibrating Buffer: 0.5% Trifluoroacetic acid in water
iii. Loading Buffer: 0.5% Trifluoroacetic acid in water
iv. Wash Buffer: 100% (v/v) Ethyl acetate, 0.5% (v/v) Trifluoroacetic acid
v. Wash Buffer: 20% (v/v) isopropanol, 0.5% (v/v) Trifluoroacetic acid
vi. Wash Buffer: 0.5% Trifluoroacetic acid in water
vii. Elution Buffer: 80% Acetonitrile, 5% NH4OH in water

We do not recommend any particular buffer, because each application has its own buffer and solutions. This products is in the method development stage and any application developed by you may be helpful.

Sample Loading

Load 20µl sample solutions(iii) as above, centrifuge 2,000 g for 60 seconds. Typical loading capacity is 1 µg of complex peptide mixture or 1 pmol of simple protein digest. The elute can be reloaded on the column if there is concern about the thoroughness of binding.

Sample Washing

Wash the packed bed with 10-20µl volumes of the wash buffer(iv) in order to wash out hydrophobic contaminants, centrifuge 2,000 g for 60 seconds, repeat this procedure 2x.

Wash the packed bed with 10-20µl volumes of the wash buffer(v) in order to wash out hydrophobic contaminants, centrifuge 2,000 g for 60 seconds, repeat this procedure 2x.

Wash the packed bed with 10-20µl volumes of the wash buffer(vi) in order to wash out hydrophilic contaminants, centrifuge 2,000 g for 60 seconds.

Sample Release

Elute the bound molecule from the packed bed with 10-20µl of Elution buffer(vii). In order to elute all of the adsorbed bound molecule, repeat to do elution with 10-20µl of Elution buffer(vii), centrifuge 2,000 g for 60 seconds in each

sample release step. Combine two elution together, evaporate and reconstitute for MS analysis.

Please be sure of that tip column is not dried out in all steps.

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