



UptiTip™ Coated Zirconium

*Sample Preparation Extraction (SPE) of micro quantities.
Phospho proteins purification.*

Catalog # : BH3730 0.1-10 µl 96 U
 BU3740 10-200 µl 96 U

Name : UptiTip™ Coated Zirconium

Applications : Zirconium dioxide surface are comprised of both acidic as well as basic adsorption sites. There are a number of substances which bind strongly on Zirconium dioxide surface e.g. chelating agents such as hydroquinoline, phosphate etc. This special selectivity arising from the coordinative binding capacity of Zr^{4+} , may be utilize in highly selective sample preparation. The estimated capacity of the 1-10 µl UptiTip Coated is 50 µg (125 µg for the 10-200 µl), of ZrO_2 and sample volumes in the range 0.5-10 µl (2-50 µl for the 10-200 µl) or larger.

Directions for use

- i. Loading Buffer : low pH (<3) solutions
- ii. Washing buffer : pure water pH 6.5, Ammonium acetate 250 mM pH6.9
- iii Elution Buffer : piperidine pH11.5, ammonium hydroxide 0.25% pH10.8

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

Conditioning Procedure

Attach the UptiTip™ to a micropipette and aspirate/expel 1-10 µl (2-50 µl) of the appropriate binding solution 5 times. Now force air (micropipette) through the UptiTip™ to remove excess buffer.

Protocol of use

Sample Binding

- Step 1. Wash with loading buffer 3x according to application or references.
- Step 2. Aspirate/expel the sample (0.1-10 µl or 2-20 µl) 50x to allow the peptides to adsorb to the ZrO_2 material.

Sample Washing

Aspirate/expel 2-10 µl (20 µl) volumes of the binding solution 10x, discarding the expelled solution each time. This will eliminate salts, lipids, and detergents.

Sample Release

Aspirate/expel 0.5-10 µl (2-10 µl) of releasing solution 10x, collecting the expelled solution in a suitable clean tube. Repeat with a fresh portion of releasing solution if you want to release and collect all of the adsorbed peptide or protein. Evaporate the solvent or proceed directly to the next analysis.

Options

Samples larger than 10 µl can be processed with these tips if peptide or salt concentrations are low. Otherwise, use item# CA8260 or BX5810.

For in vitro R&D use only

Please contact Uptima – Interchim for any other information