Exploring the benefits of IMCSTIPS®

AUTOMATED DESALTING PROTEINS & PEPTIDES

PRODUCT OVERVIEW

IMCStips use patented dispersive technology that extract analytes of interest during pipetting steps. Reverse phase resins (RP, C_4 , C_8 , C_{18}) have been used to bind peptides, nucleotides and proteins in high-aqueous solutions containing ion suppressing salts and buffers. The salts and buffers are washed off after binding the peptides to the reverse phase resin, followed by elution of peptides using a high organic solution, such as methanol or acetonitrile. Four different reverse phase resins (RP, C_4 , C_8 , C_{18}) are available for IMCStips for small peptide to large biomolecule desalting/enrichment.

IMCStips for desalting and enriching peptides, proteins and nucleotides are packaged in Hamilton CO-RE tips. The "ready to go" workflows are fully automated on the Hamilton Microlab liquid handling work stations. The software scripts for desalting by reverse phase are provided and can be integrated with other workflows such as TMT labeling, phosphopeptide enrichment and immunoaffinity/enzyme digest.

- CONSISTENT greater than 90% recovery of peptides
- FLEXIBLE varied sample volumes, aspirate/dispense cycles and wash steps
- EASY TO USE templated workflows for equilibrate, bind, wash and elute steps

Disperser Loose Resin Frit

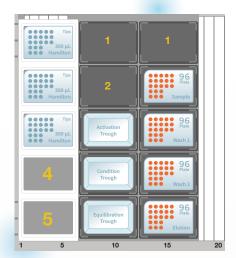
FULLY AUTOMATED METHODS AND CUSTOM SCRIPTS AVAILABLE

IMCS offers fully automated sample preparation methods for RP, C_{4} , C_{8} , C_{18} tips. Methods have been optimized and are ready for use in your process.

- 96 samples in 12 minutes
- We will send a software script package file for Hamilton systems with your tips
- · Our R&D team can help develop a customized workflow
- · We offer onsite confidential method development



Graphical User Interface



300 µL IMCStips Desalting Deck Layout



96 format IMCStips

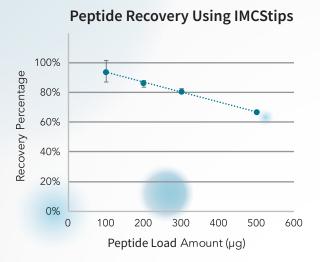


IMPLEMENTATION IS EASY WITH IMCStips®

- Software scripts for Hamilton Workstations
- Fully developed narratives guide you through each step
- Templated processes allow for customized workflows
- On-site technical support

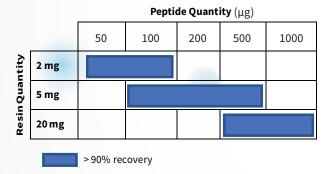


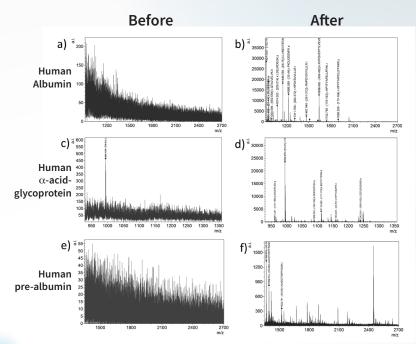
HIGH PERFORMANCE AND CONSISTENCY



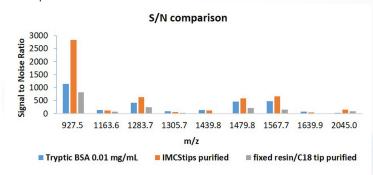
Recovery percentage of peptides using IMCStips with 2 mg RP resin from starting materials containing 100, 200, 300, and 500 μ g of peptide standards. Error bars indicate \pm 1 S.D.

Table 1. Recommended amount of resin to achieve greater than 90% recovery.





Before and after desalting of peptides (from tryptic digested proteins) on MALDI-TOF by IMCStips (a) and (b) were before and after extracted of tryptic Human albumin by IMCStips, (c) and (d) were before and after extracted of tryptic Human α -acid-glycoprotein by IMCStips, (e) and (f) were before and after extracted of tryptic Human prealbumin by IMCStips.



RP IMCSTIPS

Description	Catalog Number Rack of 96
2 mg RP resin - 300 μL tips	04T-H4R05-1-2-96
5 mg RP resin - 300 μL tips	04T-H4R05-1-5-96
20 mg RP resin - 1 mL tips	04T-H6R05-1-20-96

C₁₈ IMCSTIPS

Description	Catalog Number Rack of 96
2 mg C ₁₈ resin - 300 μL tips	04T-H4R52-1-2-96
5 mg C ₁₈ resin - 300 μL tips	04T-H4R52-1-5-96
20 mg C ₁₈ resin - 1 mL tips	04T-H6R52-1-20-96



REQUEST YOUR COMPLIMENTARY SAMPLE TODAY

- Call, email or visit www.imcstips.com to order Desalting IMCStips[®]
- Schedule a consultation with an IMCS technical sales representative for more information.