

iST TECHNOLOGY SAMPLE PREPARATION SIMPLIFIED

Welcome to the range of PreOmics sensitive, fast and easy to use sample preparation kits.

THE CHALLENGE

Complex, multi-step methods of protein sample preparation have inherent **challenges of time, contamination and sample loss.**

Preparing labelled samples over extended time periods with a complex method leads to **variation in results.**

This challenge is exacerbated with large numbers of samples and small starting amounts of input material.

THE SOLUTION

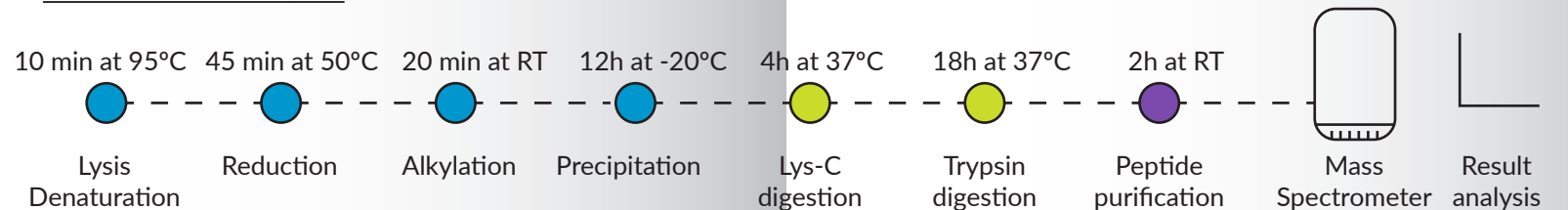
PreOmics improved sample technology (iST) enables **robust and reproducible** sample preparation.

The iST method provides **significant time savings** as complex workflows previously requiring many different reagents taking up to 48 hours are replaced by a **single kit containing all standardised reagents.**

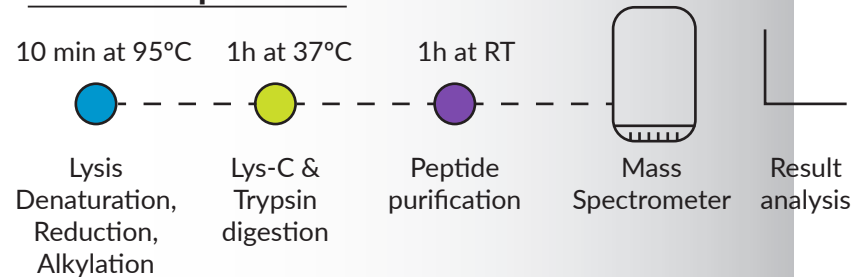
The iST kit allows protein sample preparation for mass spectrometry analysis, whether manually, semi or fully automated, in a **2-hour** time window.

PREOMICS VS COMMON PROTOCOL

Common protocol:



PreOmics protocol:



iST & iST-NHS KITS

PHOENIX KIT

AUTOMATION

iST* = Fast, reliable, reproducible protein sample preparation
 iST-NHS** = Chemical labelling (iTRAQ and TMT*) and protein sample preparation combined

SMILE

Proteomics quality results each and every time

- High reproducibility: $R^2=0.9$
- Working range: 1-100µg
- Increased number of peptides and protein identifications

RELAX

Highly efficient workflow

- 1h* hands-on time (1,5h**)
- Manual to fully automated options
- Streamlined method for isobaric labelling**
- Single step incorporating lysis, reduction & alkylation
- All-in-one solution, all reagents provided*
- No need for peptide clean up prior to labelling**

REALIZE

Cleanest peptides ready to go!

- Dual clean up step removes hydrophilic & hydrophobic contaminants
- Results in ready to measure peptides & less mass spectrometry equipment downtime
- Compatible with standard lab equipment
- No generation of unwanted TMT side reaction products**

* iTRAQ and TMT Labels not supplied

Fast, reliable, reproducible peptide clean-up for MS based proteomics

REALIZE

Cleanest peptides ready to go!

- Dual clean up step removes hydrophilic & hydrophobic contaminants
- Removal of >99.5% standard detergents, >85% Tween 20 and up to 90% peptide recovery
- No generation of unwanted TMT side reaction products
- Results in ready to measure peptides & less Mass-Spectrometry instrument downtime

RELAX

Highly efficient workflow

- Results in ready to use clean peptides
- 45-minute processing time
- Spin column format compatible with standard lab equipment
- From 1-96 samples at a time; manual to fully automated options

The PreON platform was built to address the demands of reproducible, robust and sensitive sample preparation. Free up your valuable time, standardize your results and increase your productivity.



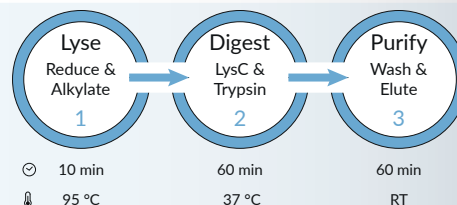
- Automates your label-free and chemical labelling workflows
- Eliminates manual processing steps (only 5 min hands-on time)
- Works seamlessly with ready-to-go PreOmics iST and iST-NHS kits
- Generates standardized and highly reproducible results

iST IMPROVED WORKFLOWS

Sample Preparation

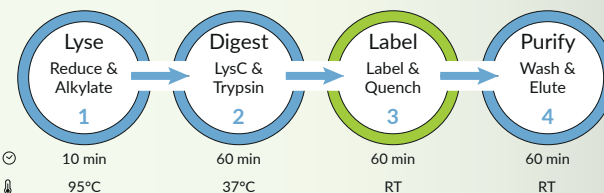
iST Kit

- excellent sensitivity for 1-100 µg
- reproducible, reliable & robust
- fast & versatile with various sample types
- proprietary peptide cleanup avoids MS downtime



iST-NHS Kit

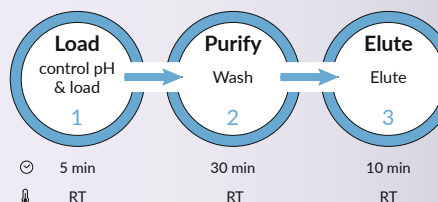
- all advantages of iST Kit
- convenient labeling within the iST workflow
- from starting material to clean & labelled peptides in less than 4 hours
- saves 50% labeling reagent



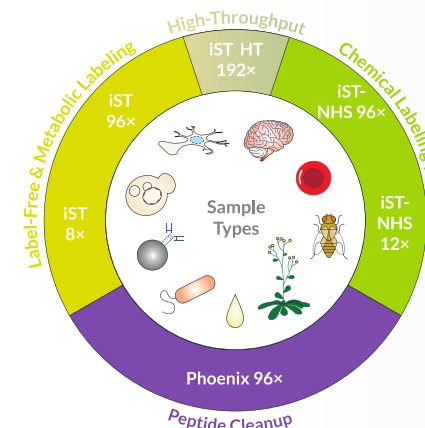
Peptide Cleanup

Phoenix Kit

- highly efficient cleanup of peptides
- removes salts, sugars, polymers, detergents, lipids, etc.
- exceptional peptide recovery
- easy-to-use, sensitive and fast



SAMPLE TYPES



- Cell lines
- Fresh & FFPE tissues
- Body fluids (serum, plasma, CSF, urine)
- Bacteria, yeast & plant tissues