

iST Technology

Sample preparation simplified

Welcome to the range of PreOmics robust, sensitive, fast and easy to use protein 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.

Common protocol:

Lysis Denaturation
10 min at 95°C

Reduction
45 min at 50°C

Alkylation
20min at RT

Precipitation
12 h at 20°C

Lys-C digestion
4h at 37°C

Trypsin digestion
18h at 37°C

Peptide purification
2h at RT



Mass Spectrometer

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 standardized 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 protocol:

Lysis Denaturation, Reduction, Alkylation
10 min at 95°C

Lys-C & Trypsin digestion
1h at 37°C

Peptide purification
1h at RT



46 hours faster!



Mass Spectrometer

iST technology values

- **Easy to use**

All-in-one solution, all reagents provided

- **Versatile**

Compatible with a wide range of sample types

- **Optimized**

High reproducibility: $R^2=0.9$

Working range: 1-100 μg

- **Fast**

~1 hour hands-on time

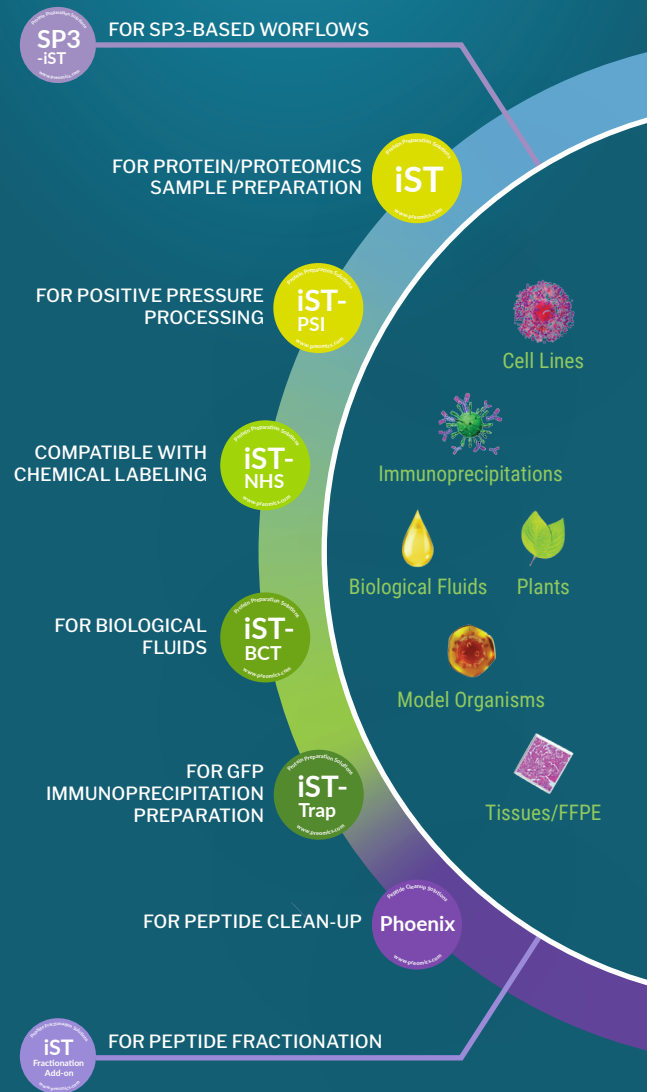
- **Clean**

Dual clean up step removes hydrophilic and hydrophobic contaminants

- **Efficient**

Reproducible, reliable and robust results
Increased number of peptides and protein identifications

Versatility of the iST technology



Sample preparation automated

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.

- Automation for label-free and chemical labeling workflows one platform
- Only 5 min hands-on time
- High reproducibility $R^2>0.99$
- Works seamlessly with pre-loaded PreOmics protocols

