

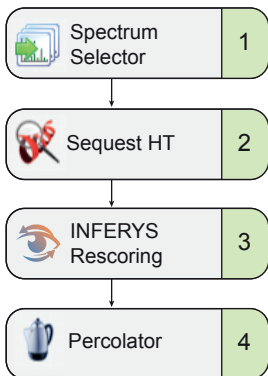


INFERYYS RESCORING BY MSAID

The powerful enhancement for classical search engines

- + Powerful AI-enhancement to well-established classical search-engines
- + Prediction-based scoring of all candidate PSMs generated by Sequest™ HT prior to FDR control
- + Increased sensitivity of analysis through better separation of target and decoy identifications
- + Streamlined implementation and fast computation on your local computer
- + Available in Thermo Scientific™ Proteome Discoverer™ 3.0 software

Workflow



Classical search engine (SE) Sequest™ HT functions as candidate generator. All candidate PSMs are predicted using INFERYYS® and scored against experimental spectra using intensity-based figures of merit. Classical SE scores and intensity-based scores are aggregated by Percolator.

Recommended for

- + Sparse data and vast search spaces
- + Single cell data & low input amounts
- + Immunopeptidomics

Compatibilities

- + CID and HCD
- + Label-free, TMT™, and TMTpro™
- + 7-30 amino acids
- + IonTrap and Orbitrap™ data
- + Met(Ox) and Cys(Cam)
- + Multiple proteases

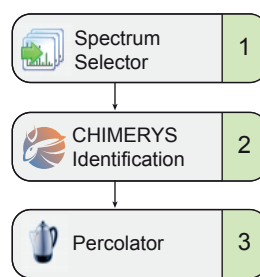


CHIMERYYS BY MSAID

The AI-driven, cloud-native, intelligent search algorithm

- + Intelligent search algorithm for next generation DDA data analysis
- + Prediction-based scoring of full isolation window and deconvolution of chimeric spectra
- + Substantially increased PSM, peptide and protein identification and quantification
- + Cloud-native microservice to streamline processing
- + Available in Thermo Scientific™ Proteome Discoverer™ 3.0 software

Workflow



powered by AWS

CHIMERYYS aims to best explain the experimental spectrum using the fewest number of peptides. All reasonable peptides within the isolation window are scored in a concerted step and compete for experimental intensity, thereby deconvoluting the spectrum. FDR estimation is performed by Percolator.

Recommended for

- + Comprehensive knowledge extraction
- + Complex data & high input amounts
- + High-throughput samples