

[WATERS OMICS RESEARCH PLATFORM SOLUTION PROTEOMICS WORKFLOW (SYNAPT)]

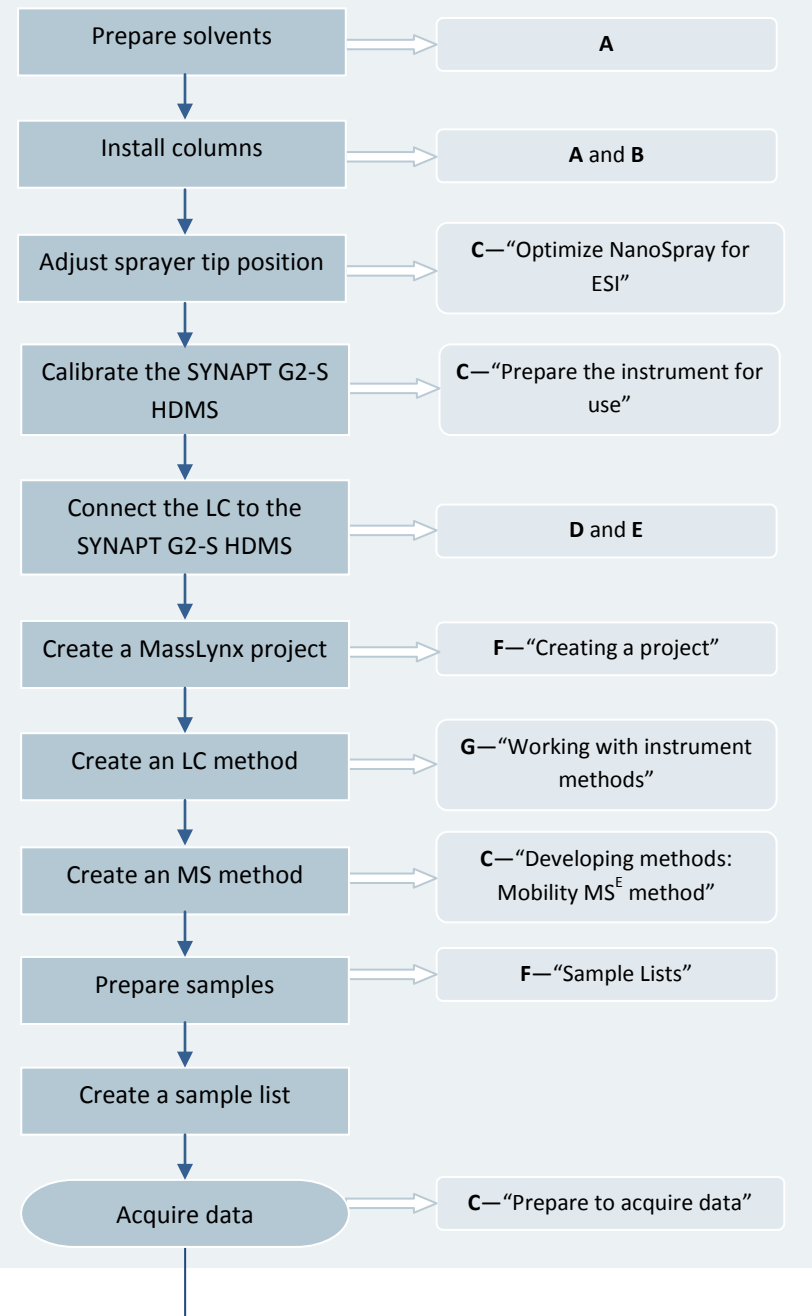
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Waters designed the OMICS Research Platform Solution (WORPS), with TransOmics™ Informatics powered by NonLinear Dynamics, as a research tool for performing discovery and for quantifying proteins in complex mixtures.

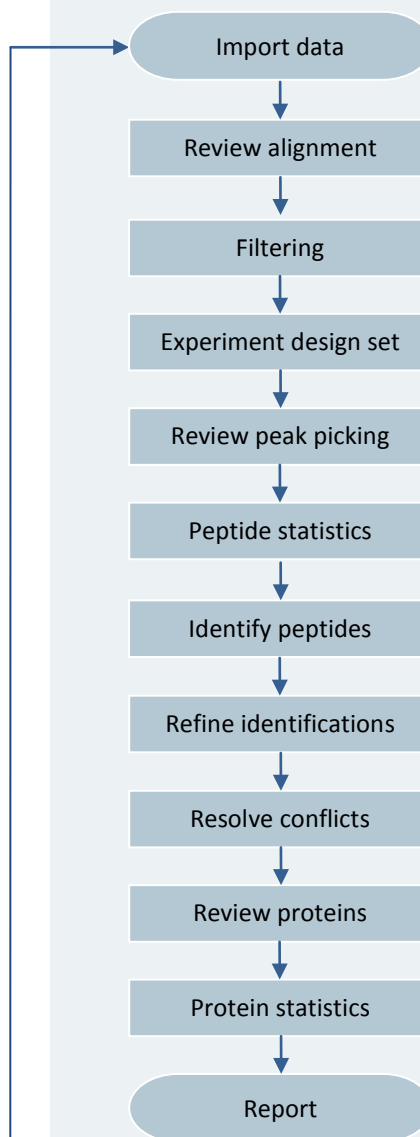
WORKFLOW FOR SETTING UP THE SYSTEM

See additional information over the page for references.



WORKFLOW FOR ANALYZING RESULTS

See Reference H, within additional information over the page, for further details on TransOmics Informatics.



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GETTING STARTED WITH CONSUMABLES AND EXAMPLE PARAMETERS

Columns	Solutions	Sample load	Gradient
Trapping—nanoACQUITY 10k-2G-V/M Trap 5µm Symmetry C18, 180 µm × 20 mm Analytical—ACQUITY UPLC 1.8 µm HSS T3 nanoACQUITY column 10k psi, 75 µm × 150 mm	Solvent A—water/0.1% formic acid Solvent B—acetonitrile/0.1% formic acid Weak needle wash—water/0.1% trifluoroacetic acid (TFA) Seal wash—90:10 water/acetonitrile	100 ng on-column of protein <i>E coli</i> digest standard	90 mins

LockSpray Solution	Source Parameters	MS Method Parameters
200 fmol/µL Glu-fibrinopeptide B (785.8426 Da)	Capillary: 3.5 kV Sampling cone: 25 V Source temperature: 70 °C	Tune for maximum sensitivity TOF acquisition mode: TOF mass range: Scan time: Collision energy function 1: Collision energy function 2: Resolution 50-2000 Da 0.5 s Trap CE 4, transfer CE 2 Trap CE ramp 4 to 5, transfer CE ramp 19 to 45

NOMINAL COMPOSITION OF MASSPREP DIGESTION STANDARDS

Refer to the data sheet supplied with the standards.

Compound	Accession number (SwissProt)	Ratio of Mix 1: Mix 2
Alcohol dehydrogenase	P00489	1
Glycogen phosphorylase	P02769	2
Bovine serum albumin	P00924	0.125
Enolase	P00330	0.5

ADDITIONAL INFORMATION

- A. nanoACQUITY UPLC Documentation CD (715003458)
- B. *Symmetry Columns Care and Use Manual* (WAT047278)
- C. SYNAPT G2-S HDMS online Help (access from the Waters MassLynx software)
- D. *Waters Universal NanoFlow Sprayer Installation and Maintenance Guide* (71500110107)
- E. SYNAPT G2-S HDMS Documentation CD (715002979)
- F. MassLynx online Help (access from the Waters MassLynx software)
- G. nanoACQUITY UPLC System online Help (access from the Waters MassLynx software)
- H. *TransOmics Informatics for Proteomics User Guide*

For additional, detailed information, refer to the *Waters Omics Research Platform Solution for Proteomics System Guide* (SYNAPT) (715003704). You can also consult the Waters Web site, www.waters.com/omics.