

ProSIALH Peptide Mapper

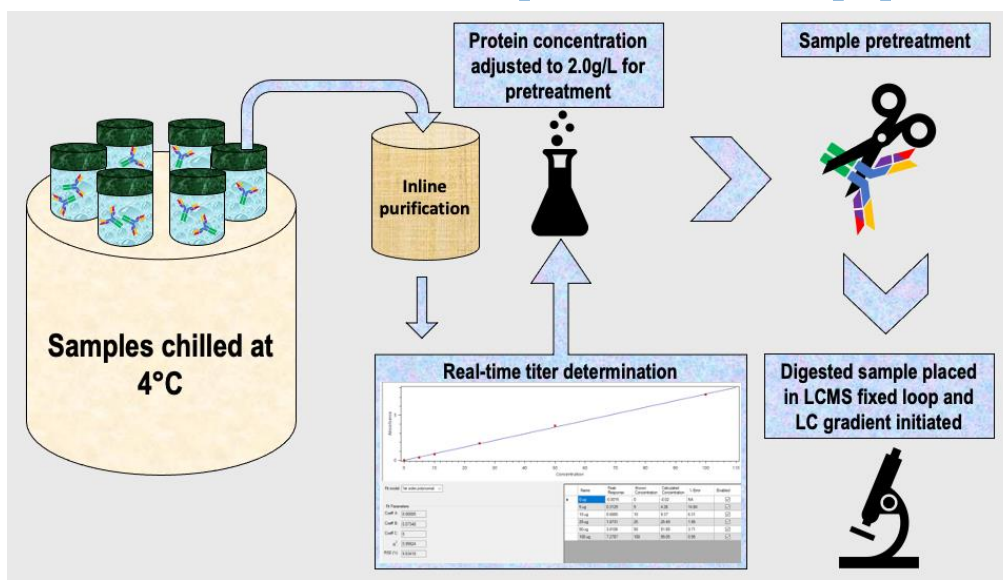


Figure 1- Peptide mapping sample flow path using the ProSIA pretreatment solution.

FIALab's sampling and pretreatment solution automates bioreactor peptide or glycan monitoring in the biopharmaceutical community to reduce overhead, cut plastic usage and save time.



Advantages of a FIALab ALH over pipetting robots:

- ✓ Less hands on using 2-in-1 automation with live titer adjustments before digestion
- ✓ Absolutely no pipette tips or well plates needed
- ✓ Injection into LCMS is robust, requires no intervention and has no moving parts
- ✓ Upgradable to a Process Analytical Technology (PAT) with the same methods
- ✓ Real-time data processing – digested samples never left sitting in well plates
- ✓ Compatible with any type of LCMS (Agilent, Thermo, Waters, etc)
- ✓ No volume verifications by lab personnel and are completed on the annual PM

Data Analysis

Seamless and Intuitive Calibrations

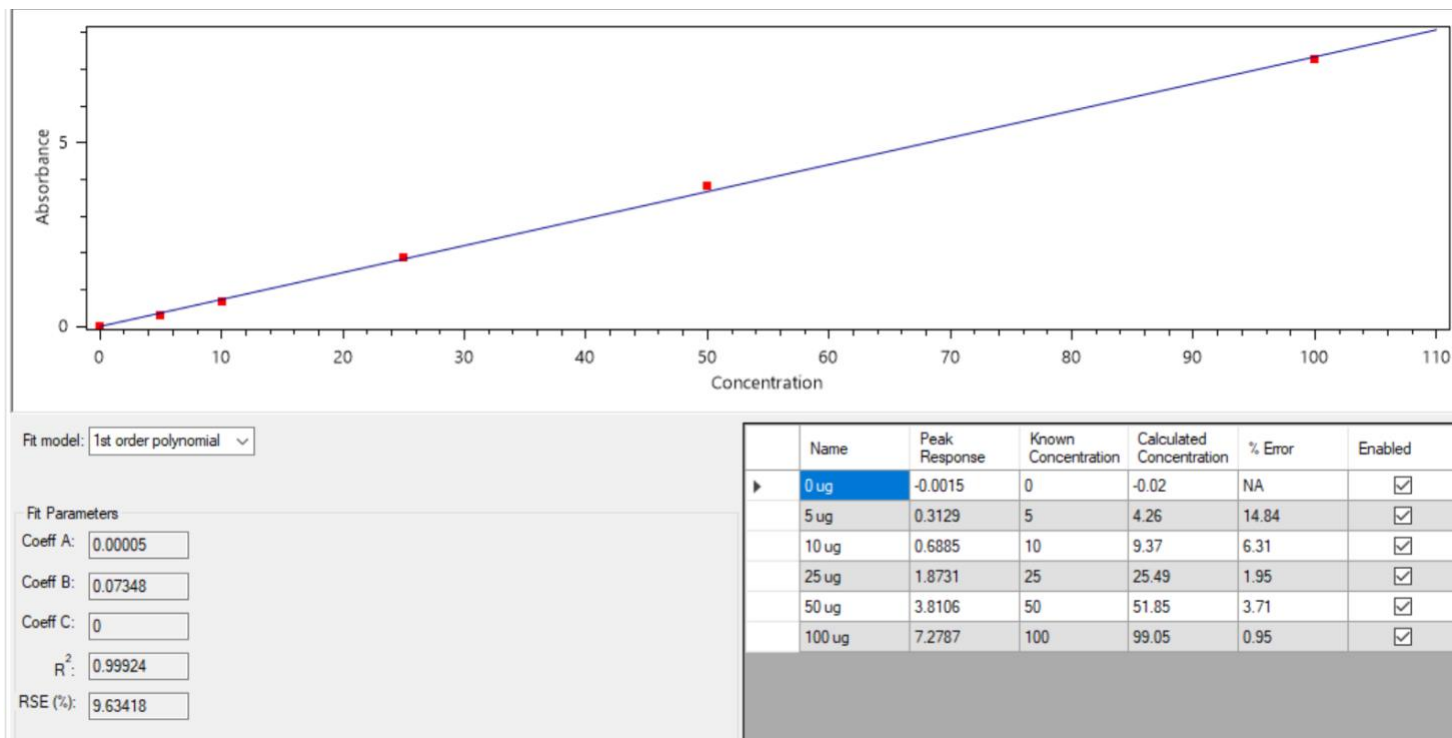


Figure 2 – Calibration data of bovine IgG (SigmaAldrich PN I9640) measured off a ProA column at 280 nm using the ThermoFisher POROS™ resin.

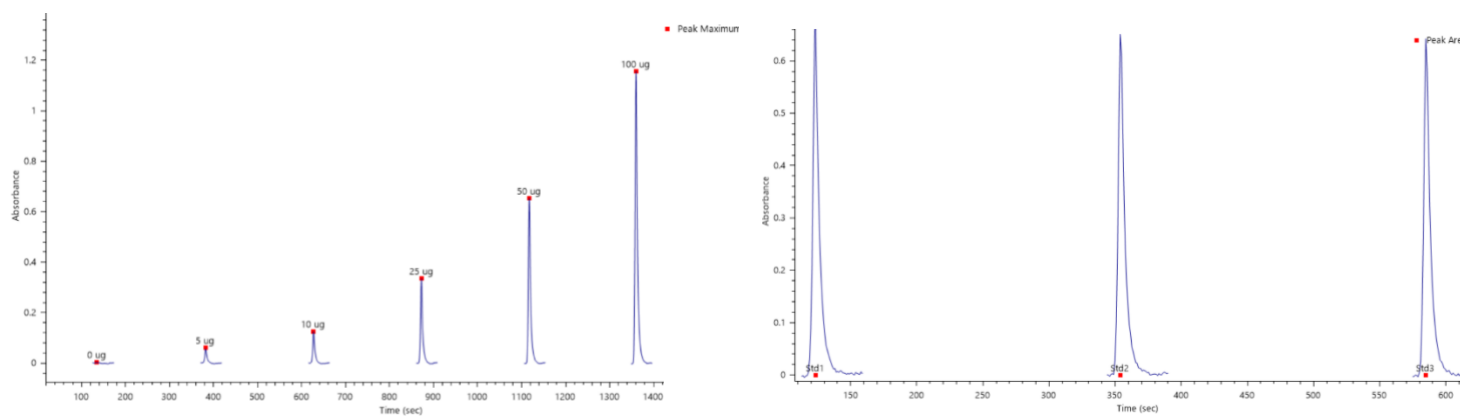


Figure 3 - Example plots of bovine IgG (SigmaAldrich PN I9640) calibration and triplicate injections using the ThermoFisher POROS™ resin.

Resin	KanCap™	POROS™	MabSelect™ SuRe™
Replicate 1	3.24	3.81	1.71
Replicate 2	3.23	3.82	1.73
Replicate 3	3.26	3.81	1.69
Average	3.25	3.82	1.71
Standard dev.	0.012	0.007	0.015
RSD	0.38%	0.17%	0.88%

Figure 4 - Integrated response of 500µg bovine IgG (n = 3) measured off a ProA column at 280 nm using three different resins. The Kaneka KanCap™ from Kaneka Corporation, the ThermoFisher POROS™ and the Cytiva MabSelect™ SuRe™ resins were all tested for relative binding efficacy and precision.