

The 5 Advantages of LC-MS-based Host Cell Protein Profiling

While ELISA methods have historically been the main approach for detecting total HCP content, LC-MS-based HCP detection methods have increasingly become an expected orthogonal standard in **successful biologic development**. HCP characterization can be conducted at an early stage to assess the profile quickly and then may be applied with greater rigor at a later stage to support BLA/regulatory filings.

Why We Recommend This Approach

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Excellent sensitivity, accuracy and precision of detection (single-digit ppm)

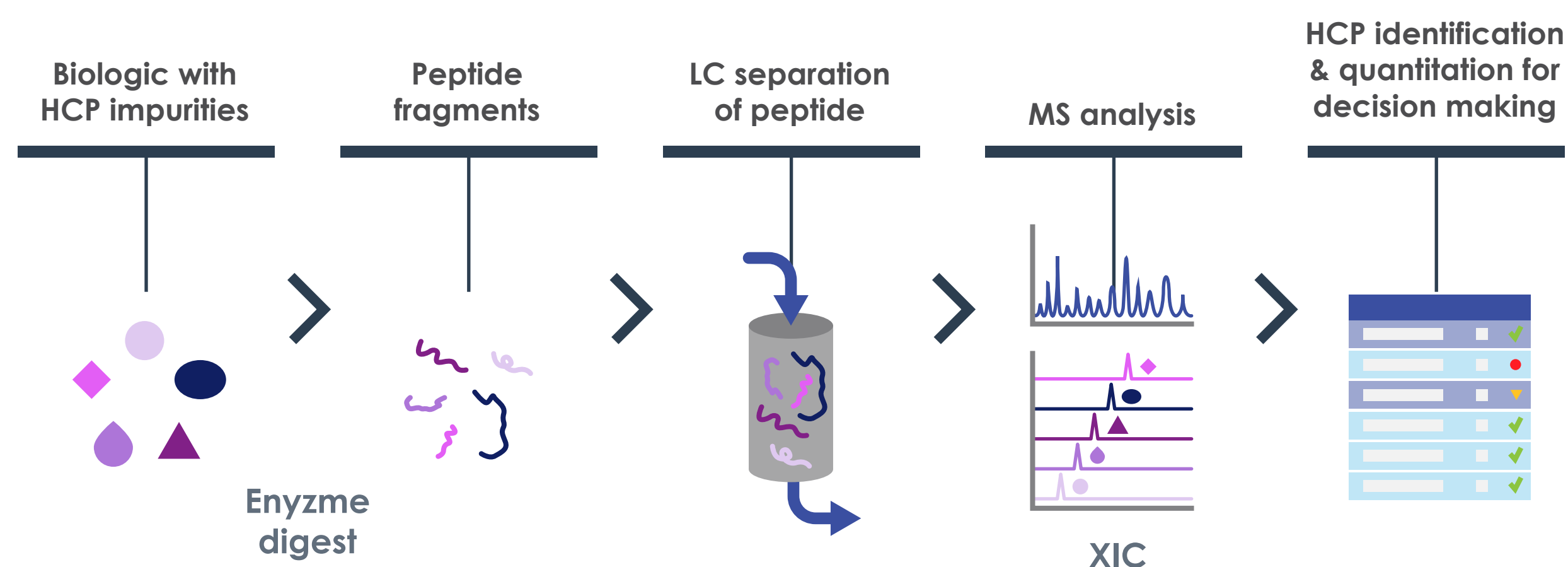
Fast estimate of concentration based on selected peptides and rapid assessment of relative amounts

No custom immunoreagents required

Knowledge of HCP identities informs risk assessment and corresponding process changes

Using an established method, diverse samples can be evaluated efficiently and compared to guide process development decisions

LC-MS Approach to HCP Profiling



HCP profiling is applied to a wide range of biologic products, from antibodies to enzymes to gene/cell therapies, which are manufactured using diverse cell types. We have developed complete peptide libraries for common expression systems, including CHO, HEK, and *E.coli*. We have also worked with our clients on unique host cell systems to develop customized, corresponding libraries.

BioAnalytix • Protagen Protein Services

ADVANCE. DE-RISK. ACCELERATE.

Contact our team to learn how LC-MS-based HCP profiling can help advance and accelerate the development of your biologic programs.

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