

## Biological drugs (Antibodies, Antibodies-Drug Conjugates) Characteristics by high mass-accuracy LC-MS/MS

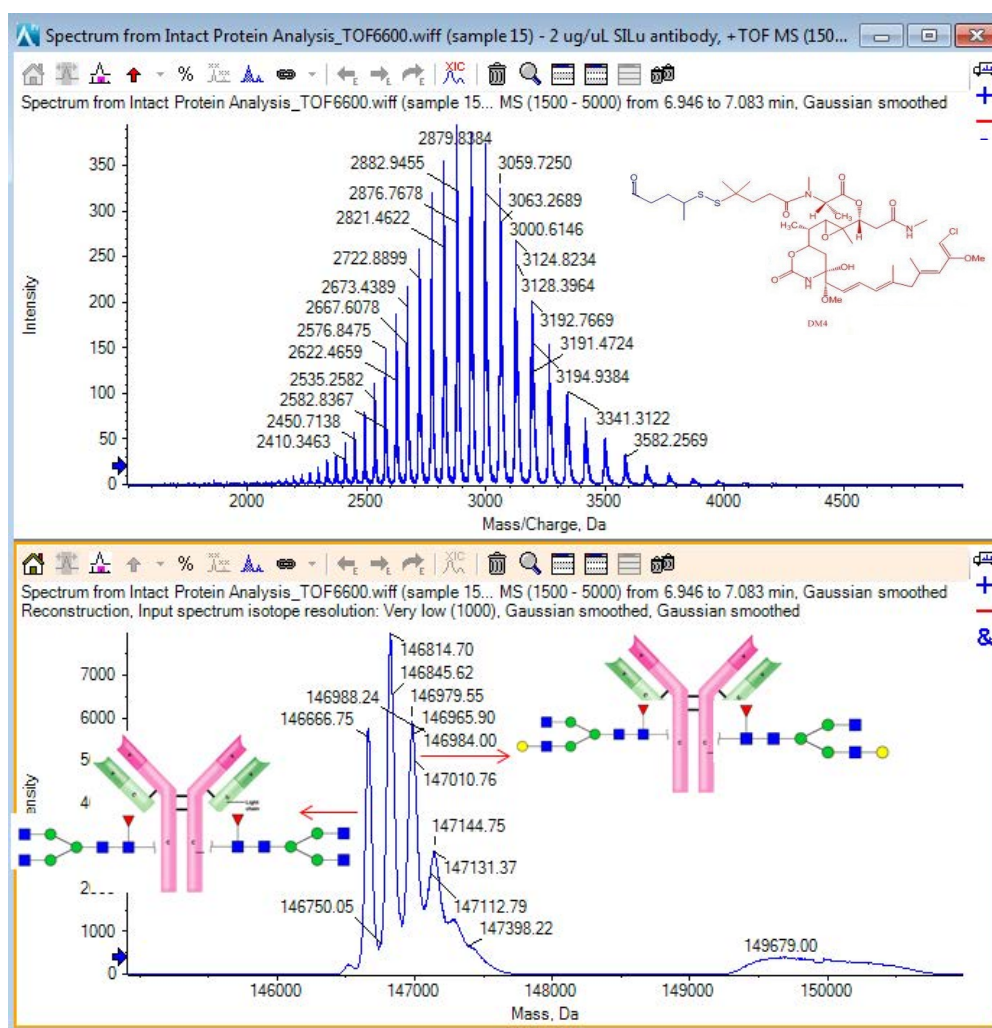
Nextcea high mass  
accuracy LC/MS/MS

### Biosimilar and Therapeutic Antibodies

- N-terminal Heterogeneity: Pyroglutamate,.....
- Amino acid modifications: Deamination, Oxidation, Glycation
- Fragmentation: Cleavage in hinge region
- Oligosaccharides: Fucosylation, Sialylation,.....
- Disulfide Bonds: free thiols, disulfide shuffling, thioether
- C-terminal heterogeneity: Proline amidation, lysine truncation

### Antibody Drug Conjugate (ADC)

- # of toxins/drugs, variable drug-antibody ratio (DAR)
- ADC DAR distribution impacting Efficacy and PK/TK



### About Nextcea, Inc.

Nextcea, Inc. is a drug development service company dedicated to optimizing efficacy and minimizing toxicity in all phases of drug development. Nextcea integrates cross-species biomarker studies with traditional PK/PD and TK/TD. In-house platforms include HPLC/UPLC coupled to mass spectrometry LC-MS and LC-MS/MS (API-6500s and TripleTOF 6600).

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