

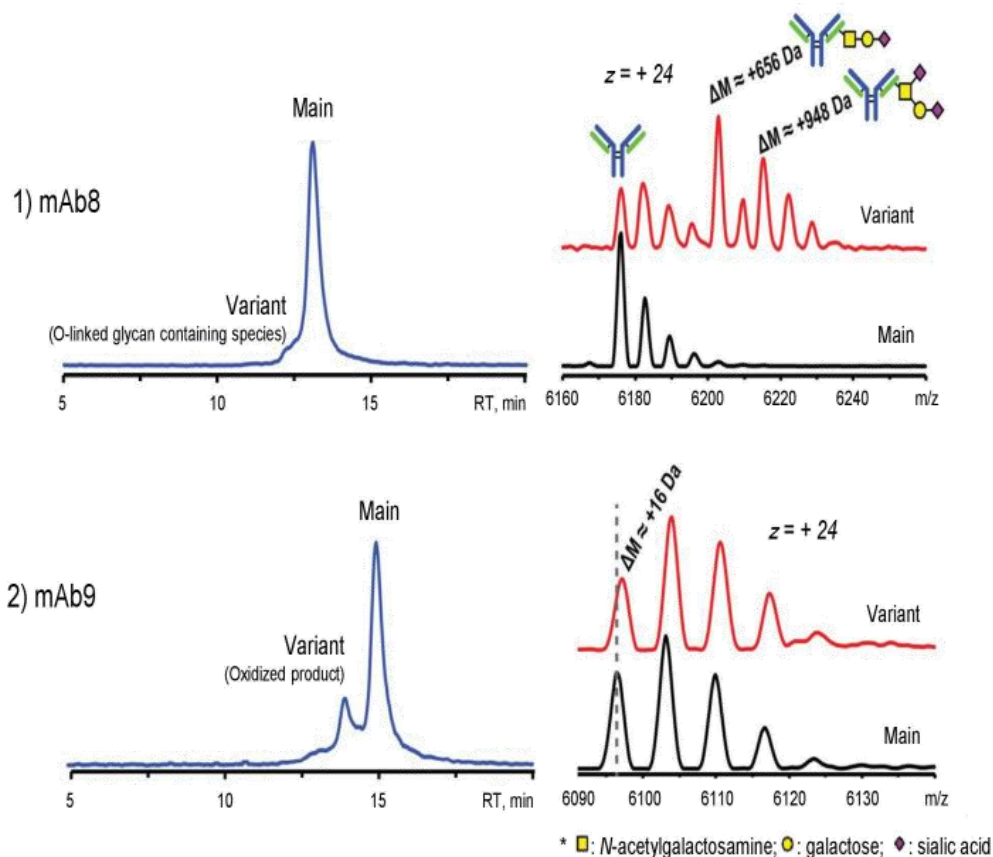
モノクローナル抗体変異体のオンラインネイティブ質量分析 (HIC-MS)

Online native HIC-MS analysis of monoclonal antibody molecular variants

W200519B

[HIC-MS (TIC)]

[The averaged native mass spectra
(zoom-in region of charge state +24)]



Courtesy of S. Wang, Regeneron Pharmaceuticals Inc.

Column	: BioPro HIC BF (4 μ m) 100 X 4.6 mm I.D.
Eluent	: A) 3 M $\text{CH}_3\text{COONH}_4$ B) water 0%B (0-2 min), 0-90%B (2-18 min), 90%B (18-22 min)
Flow rate	: 0.3 mL/min (To enable online simultaneous UV and MS detection, a post-column makeup and splitting flow platform was applied.)
Temperature	: ambient
Detection	: nanospray ionization-mass spectrometry (NSI-MS)
Load	: 10 μ g
Sample	: mAb8 and mAb9
System	: LC) Ultimate™ 3000 UHPLC system (Thermo Fisher Scientific) MS) Q Exactive™ UHMR mass spectrometer (Thermo Fisher Scientific)

Reference:

Y. Yan, T. Xing, S. Wang, T. J. Daly, N. Li, Online coupling of analytical hydrophobic interaction chromatography with native mass spectrometry for the characterization of monoclonal antibodies and related products, J. Pharm. Biomed. Anal. 186 (2020) 113313.