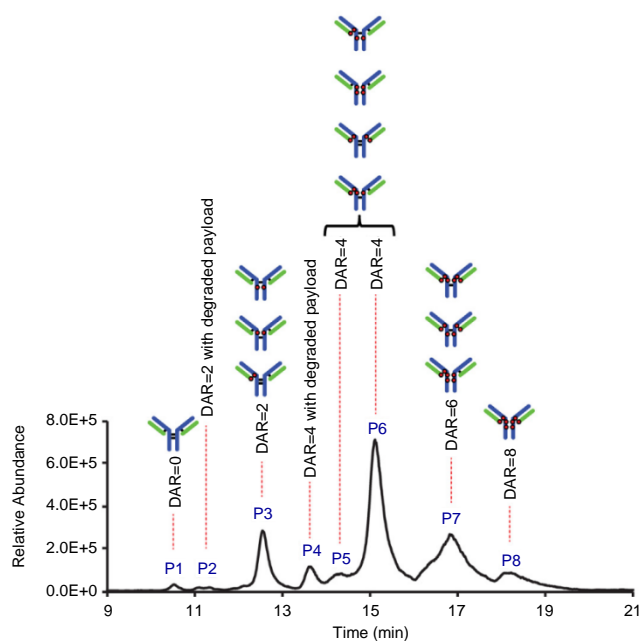


システイン結合型抗体薬物複合体(ADC)のオンラインネイティブ質量分析(HIC-MS)
Online native HIC-MS analysis of cys-linked ADCs*

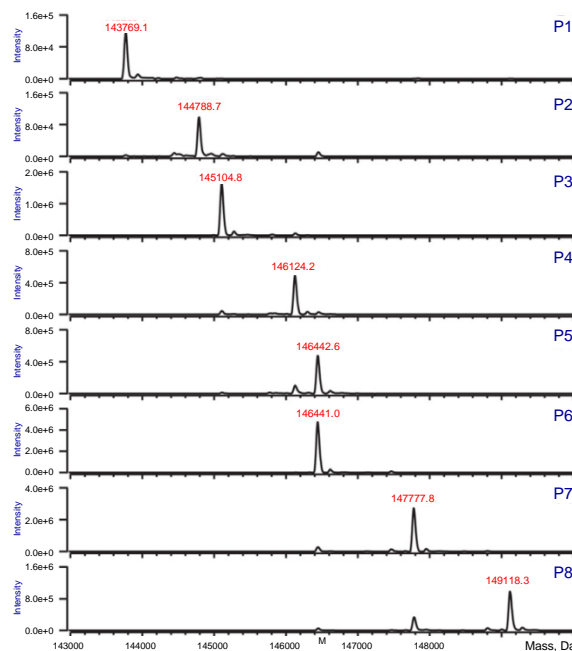
W200519C

*ADCs : Antibody-Drug Conjugates

[HIC-MS (BPC:base peak chromatogram)]



[Deconvoluted mass spectra]



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) 2-propanol/water (30/70) 10%B (0-2 min), 10-97%B (2-18 min), 97%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	: Cysteine-conjugated ADC mimic deglycosylated by PNGase F
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.