IgG2 Comparison on HALO 1000 Å C4, ES-C18, and Diphenyl

TEST CONDITIONS:

Columns:
HALO 1000 Å C4, 2.7 µm, 2.1 x 150 mm
  Part Number: 92712-714
HALO 1000 Å ES-C18, 2.7 µm, 2.1 x 150 mm
  Part Number: 92712-702
HALO 1000 Å Diphenyl, 2.7 µm, 2.1 x 150 mm
  Part Number: 92712-726

Mobile Phase A:
  2:10:88 n-propanol/ACN/H2O
  + 0.1% difluoroacetic acid (DFA)

Mobile Phase B:
  70:20:10 n-propanol/ACN/H2O + 0.1% DFA

Gradient: 16–26% B in 20 min

Flow Rate: 0.2 mL/min

Temperature: 80°C

Instrument: Shimadzu Nexera

Detection: PDA 280 nm; 350 nm reference

Injection Volume: 2 µL of 2 mg/mL denosumab

Sample Solvent: water (0.1% TFA)

PEAK IDENTITIES:

1. IgG2-B
2. IgG2-B
3. IgG2-A/B
4. IgG2-A/B
5. IgG2-A
6. IgG2-A*

Note: Labels on ES-C18 chromatogram also apply to C4 and Diphenyl chromatograms.

There are currently three bonded phases available on HALO 1000 Å Fused-Core® particles – C4, ES-C18, and Diphenyl. Each shows unique selectivity for the separation of monoclonal antibodies. In this example, denosumab isoforms are resolved using a shallow gradient with the addition of n-propanol. Diphenyl phase is the most retentive phase, followed by ES-C18, and then C4. All three phases are recommended to be screened to determine which one yields the optimum separation for mAbs under investigation.

FOR MORE INFORMATION OR TO PLACE AN ORDER, CONTACT:

www.advanced-materials-tech.com

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