

Overlay of PEGylated vs. Native Proteins on Jupiter® 300 C4 Column

Column: Jupiter® 5 µm C4 300 Å, LC Column 150 x 4.6 mm, Ea

Dimensions: 150 x 4.6 mm ID

Order No: 00F-4167-E0

Elution Type: Gradient

Eluent A: 0.1% TFA and 2% ACN in Water

Eluent B: 70/20% ACN/IPA, 0.08% TFA in Water

| Gradient Profile: | Step No. | Time (min) | Pct A | Pct B |
|-------------------|----------|------------|-------|-------|
| | 1 | 0 | 85 | 15 |
| | 2 | 25 | 30 | 70 |

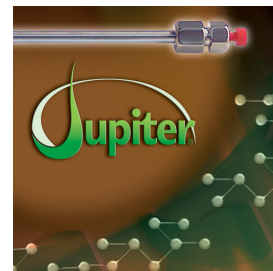
Flow Rate: 1 mL/min

Col. Temp.: 45 °C

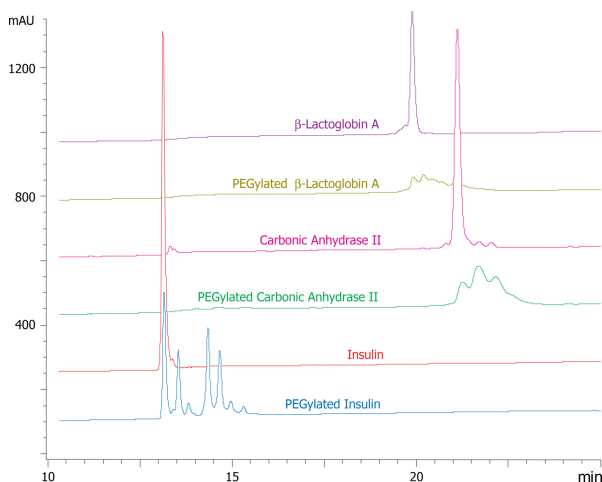
Detection: UV-Vis Abs.-Variable Wave.(UV) @ 214 nm (ambient)

Analyst Note: Application Focus: Using Jupiter 300 C4 for purifying PEGylated proteins.

16191 For many protein therapeutics, a polyethylene glycol (PEG) group is attached to a protein to increase its serum half-life. The addition of such PEG groups to a protein complicates both the characterization and purification of such PEG/protein conjugates away from the "non-PEGylated" protein. As mentioned in App ID# 16198, the PEGylation reaction concurrently occurs rapidly at several different protein sites in a fixed ratio. In every protein tested there was always more than one PEGylated protein peak observed by reversed phase HPLC; each seemingly ascribed to a different



Products used in this application:



ANALYTES:

- 1 PEGylated vs. Native Proteins

