HPLC Application

ID No.: **18073**

Interferon Alpha intact 5% impurity on Jupiter 3u C18 and Jupiter 5u C4

Column: Jupiter® 3 µm C18 300 Å, LC Column 150 x 2 mm, Ea
Dimensions: 150 x 2 mm ID
Order No: 00F-4263-B0
Elution Type: Gradient
Eluent A: 0.1% TFA and 2% Acetonitrile in Water
Eluent B: 0.085% TFA, 90% Acetonitrile in Water

Gradient Profile:

Step No.	Time (min)	Pct A	Pct B
1	0	80	20
2	10	20	80
3	15	10	90

Flow Rate: 0.3 mL/min
Col. Temp.: 25 °C
Detection: UV-Vis Abs.-Diode Array (PDA) @ 220 nm (25 °C)

Products used in this application:

Analyst Note: Application Focus: To demonstrate Jupiter 300 utility for separating folded from unfolded biogeneric proteins

Unlike other separation techniques, reversed phase can often visualize differences between intact and unfolded/ mis-folded protein states. Especially with E Coli produced recombinant proteins, refolding analysis is often required as part of both manufacturing process analysis technology. In App ID# 18073 5% of unfolded interferon was added to the intact protein. As one can see from the overlaid chromatograms, both columns could easily detect unfolded impurities lower than 5% with good, rapid resolution from the intact protein in fewer than 15 minutes. This application

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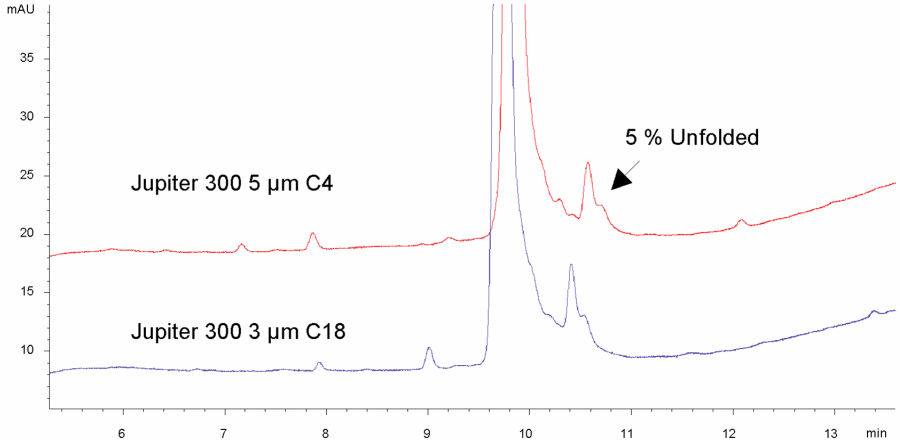

ANALYTES:

1 Intact & 5% impurity