

HPLC Application

ID No.: 18074

Interferon Alpha intact & oxidized on Jupiter 3u C18 and Jupiter 5u C4

Column: Jupiter[®] 3 μ m 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 |

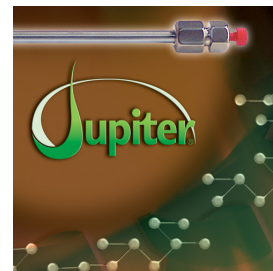
Flow Rate: 0.3 mL/min

Col. Temp.: 25 °C

Detection: UV-Vis Abs.-Diode Array (PDA) @ 220 nm (25 °C)

Analyst Note: Application Focus: Using Jupiter 300 media for development of intact biogenic protein assays for oxidation.

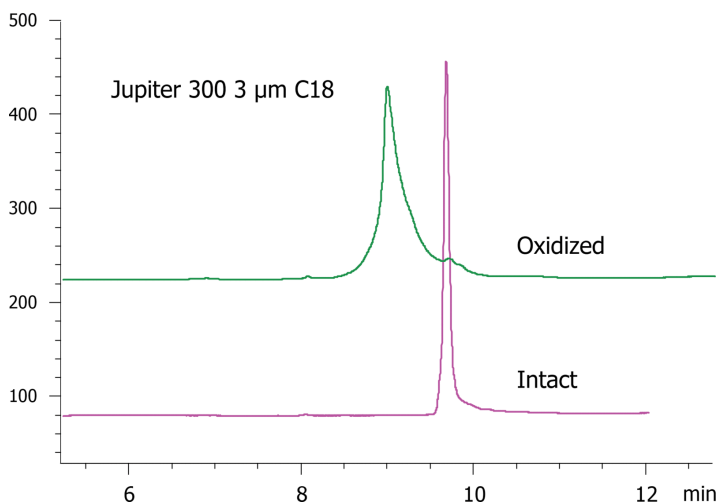
Physical and chemical degradation of therapeutic proteins is a critical problem that can occur during production, purification, and storage. Such modifications can affect protein immunogenicity leading to serious consequences if the protein is being used as a therapeutic. Chromatograms overlaid chromatographs of the intact versus oxidized alpha interferon clearly show good selectivity between the two samples; oxidized Interferon elutes earlier than the intact protein and has a dramatically tailing peak. While both the C4 and C18 phases both had good resolution, the 3 μ m C18



Products used in this application:



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ANALYTES:

- 1 Intact & Oxidized Interferon

