

# 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)

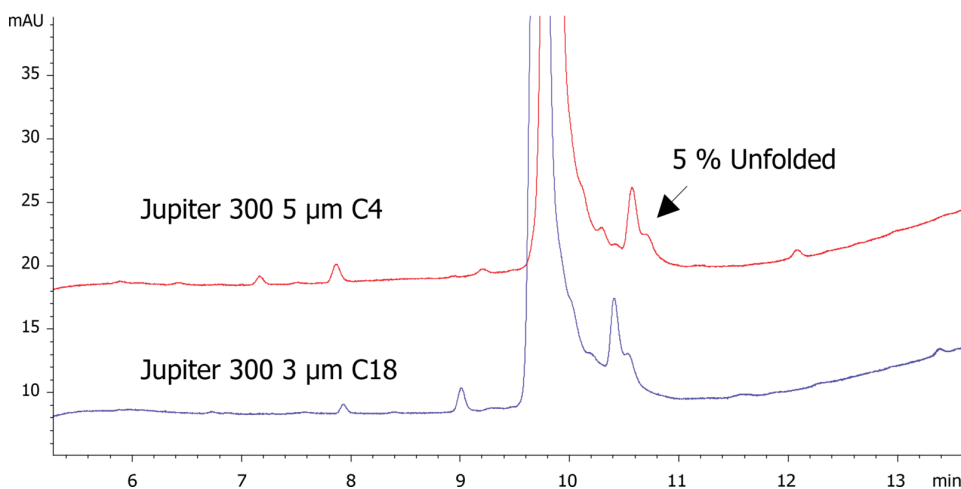
**Analyst Note:** Application Focus: To demonstrate Jupiter 300 utility for separating folded from unfolded biogenic proteins

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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Products used in this application:



### ANALYTES:

- 1 Intact & 5% impurity

