Intrada WP-RP

High Resolution Protein Separation

Improved Protein Recovery for Polymer Separation

Reverse-column tailored with a 30nm pore size

Optimal for the separation of proteins and other large molecules up to 300,000 Da

Low Carryover

Unique packing reduces carryover

Superior Resolution Column with 3µm Particles

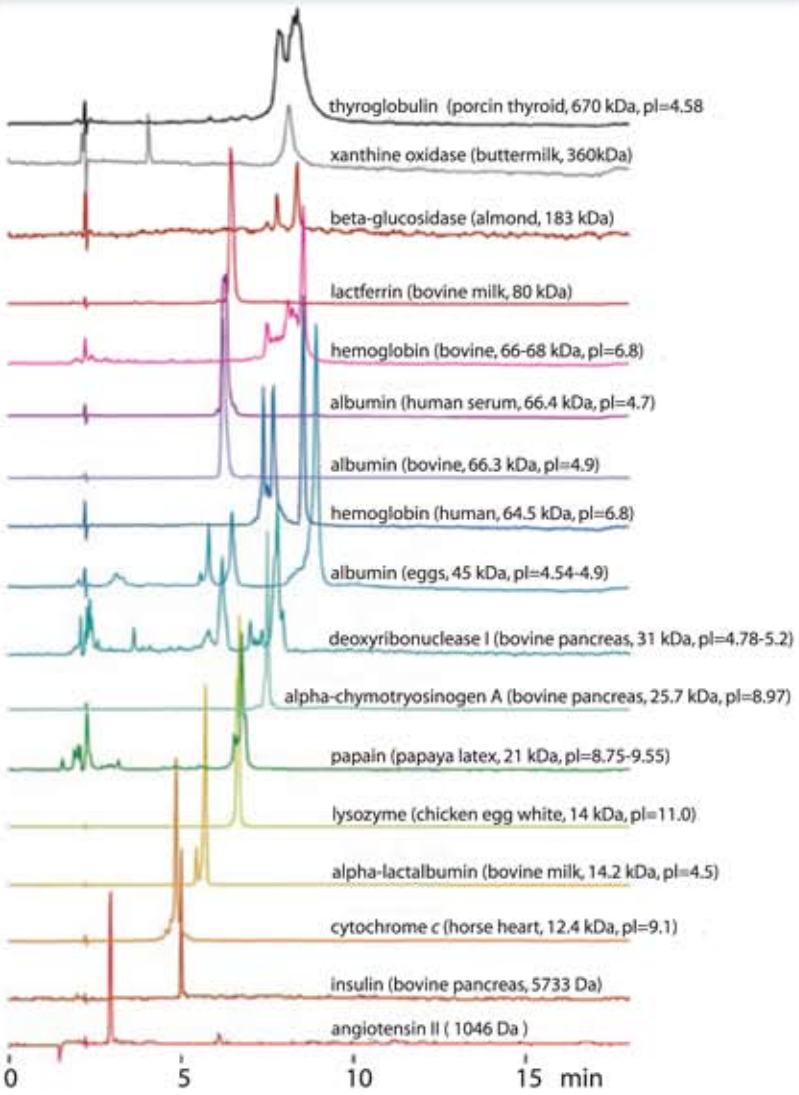
High Resolution 3µm Silica is used

Radically improved column efficiency compared with conventional 5µm columns

Optimal Surface Polarity for Faster Polymer Elution

Uses a newly developed reverse phase ligand

Highly hydrophobic polymer elution made possible by optimal surface polarity



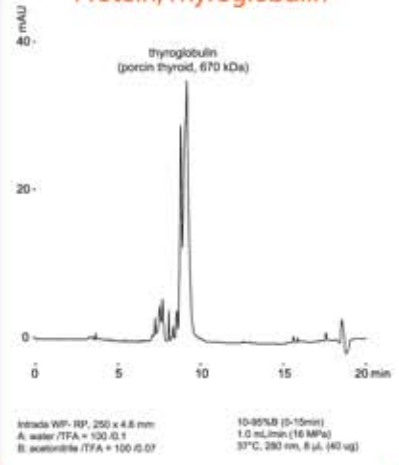
Intrada WP-RP, 150x4.6 mm, 1mL/min, 37deg C, 280nm
A: water / TFA= 100/0.1, B: ACN / TFA=100/0.1, 20-70%B (0-15min)

The chromatograms above show the relationship between molecular weight and retention. For the reverse phase separation of large proteins (greater than 10,000 Da), a wide pore (300A) column should be used. Intrada WP-RP (300A) is an excellent column of choice for the reverse phase separation of large, highly hydrophobic polymers and proteins (up to 300,000 Da).

Key specifications: 3µm particle size, 30nm pore size, ligand for reverse phase, polymeric endcapping

Intrada WP-RP: Exceptional Protein Separation

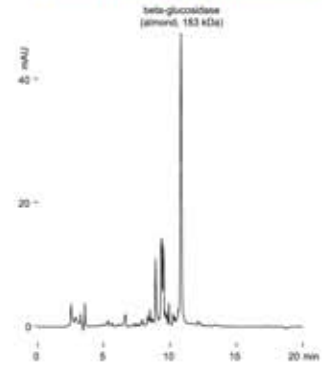
Protein, Thyroglobulin



Intrada WP- RP, 250 x 4.6 mm
A: water /TFA = 100 /0.1
B: acetonitrile /TFA = 100 /0.07

10-95%B (0-15min)
1.0 mL/min (16 MPa)
37°C, 280 nm, 8 µL (40 ug)

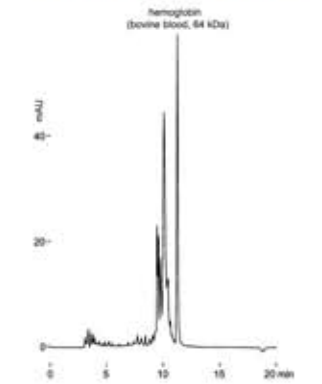
Protein, beta-Glucosidase



Intrada WP- RP, 250 x 4.6 mm
A: water /TFA = 100 /0.1
B: acetonitrile /TFA = 100 /0.07

30-50%B (0-15min)
1.0 mL/min (16 MPa)
37°C, 280 nm, 8 µL (42.4 ug)

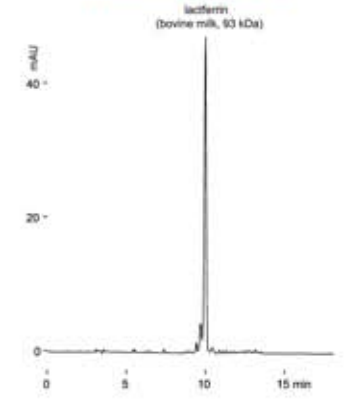
Protein, Hemoglobin



Intrada WP- RP, 250 x 4.6 mm
A: water /TFA = 100 /0.1
B: acetonitrile /TFA = 100 /0.07

20-65%B (0-15min)
1.0 mL/min (16 MPa)
37°C, 280 nm, 8 µL (42.4 ug)

Protein, Lactferrin



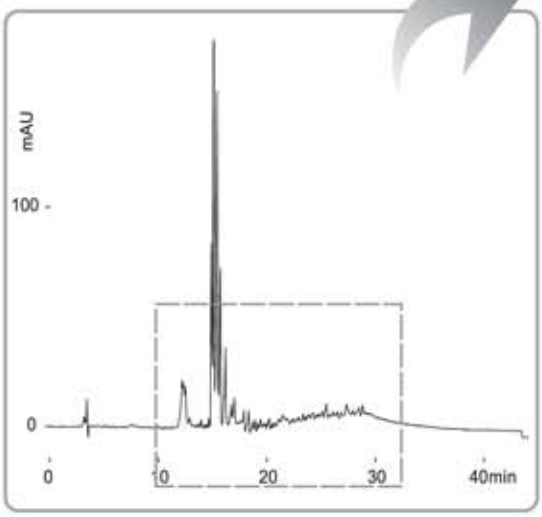
Intrada WP- RP, 250 x 4.6 mm
A: water /TFA = 100 /0.1
B: acetonitrile /TFA = 100 /0.07

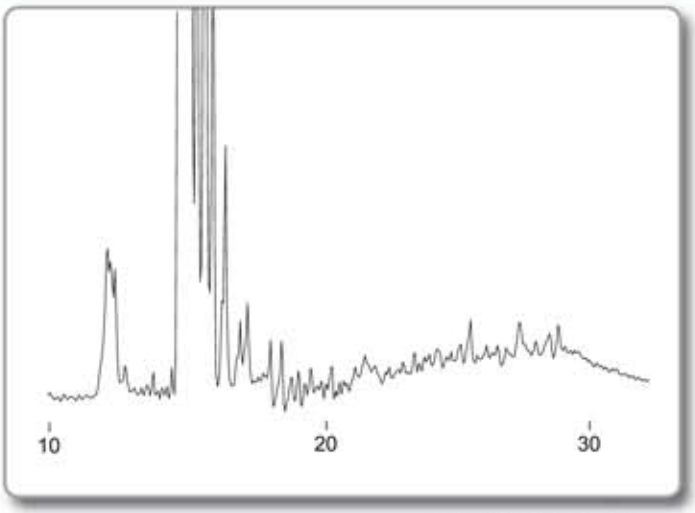
20-50%B (0-15min)
1.0 mL/min (16 MPa)
37°C, 280 nm, 3 µL (15.3ug)

These chromatograms demonstrate the ability of Intrada WP-RP in protein purification. For the reversed phase separation and purification of proteins, TFA gradients are often needed.

Intrada WP-RP excels at protein separation due to ultra high efficiency, as well as its polymeric endcapping.

Bovine Serum

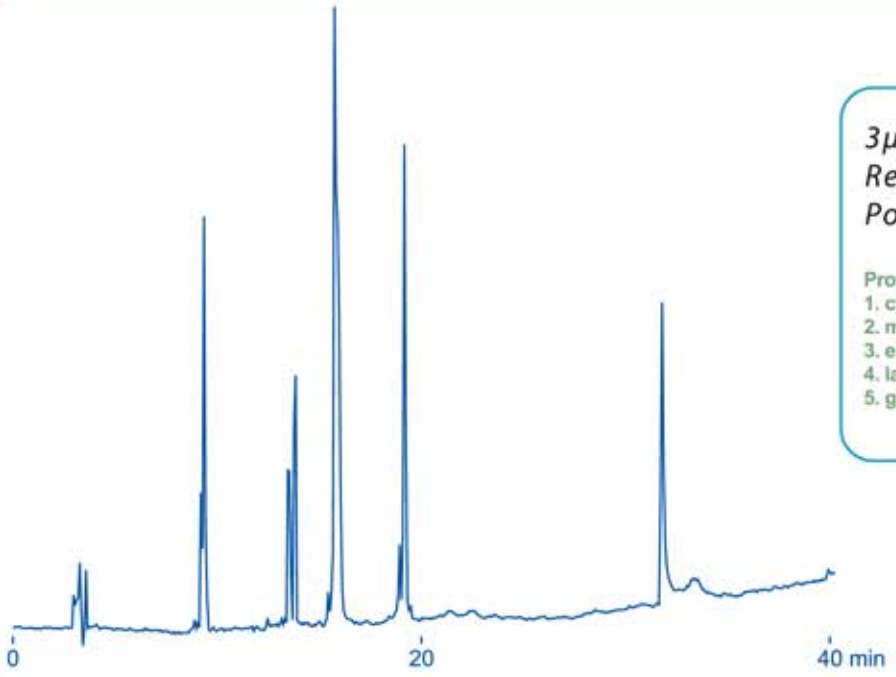




Intrada WP- RP, 250 x 4.6 mm
A: water /TFA = 100 /0.1
B: acetonitrile /TFA = 100 /0.07

25-50%B (0-40min)
1.0 mL/min (16 MPa)
37°C, 220 nm, 0.4 µL

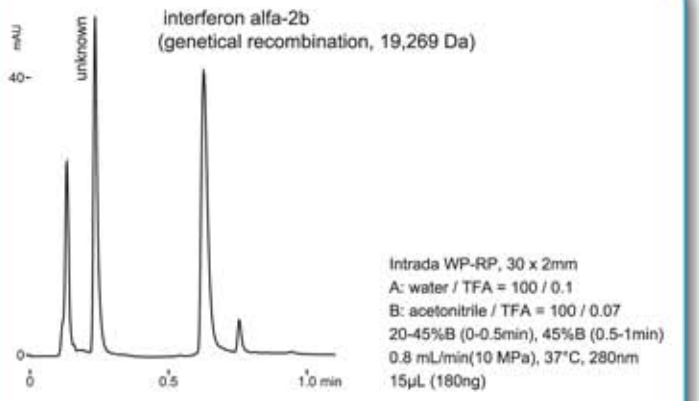
Excellent Peak Shape



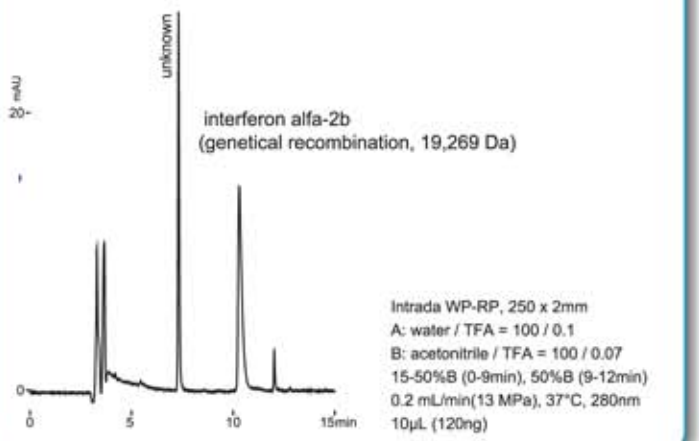
3µm, 30mm, Pure Silica
Reversed Phase
Polymeric Endcapping

Proteins	M.W. (kDa)
1. cytochrome c (horse heart)	12.4
2. myokinase (yeast)	32
3. enolase (yeast)	67
4. lactate dehydrogenase (pig heart)	142
5. glutamate dehydrogenase (yeast)	290

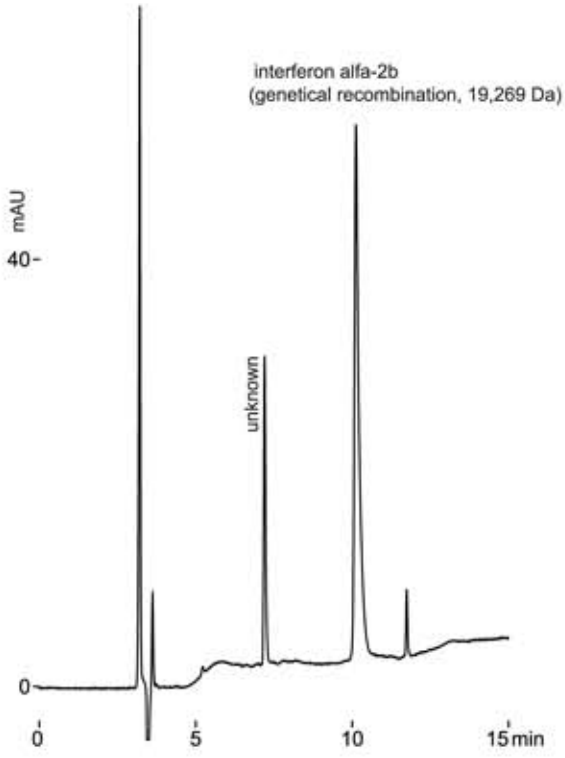
Effective Interferon Retention



Intrada WP-RP, 30 x 2mm
A: water / TFA = 100 / 0.1
B: acetonitrile / TFA = 100 / 0.07
20-45%B (0-0.5min), 45%B (0.5-1min)
0.8 mL/min(10 MPa), 37°C, 280nm
15µL (180ng)



Intrada WP-RP, 250 x 2mm
A: water / TFA = 100 / 0.1
B: acetonitrile / TFA = 100 / 0.07
15-50%B (0-9min), 50%B (9-12min)
0.2 mL/min(13 MPa), 37°C, 280nm
10µL (120ng)

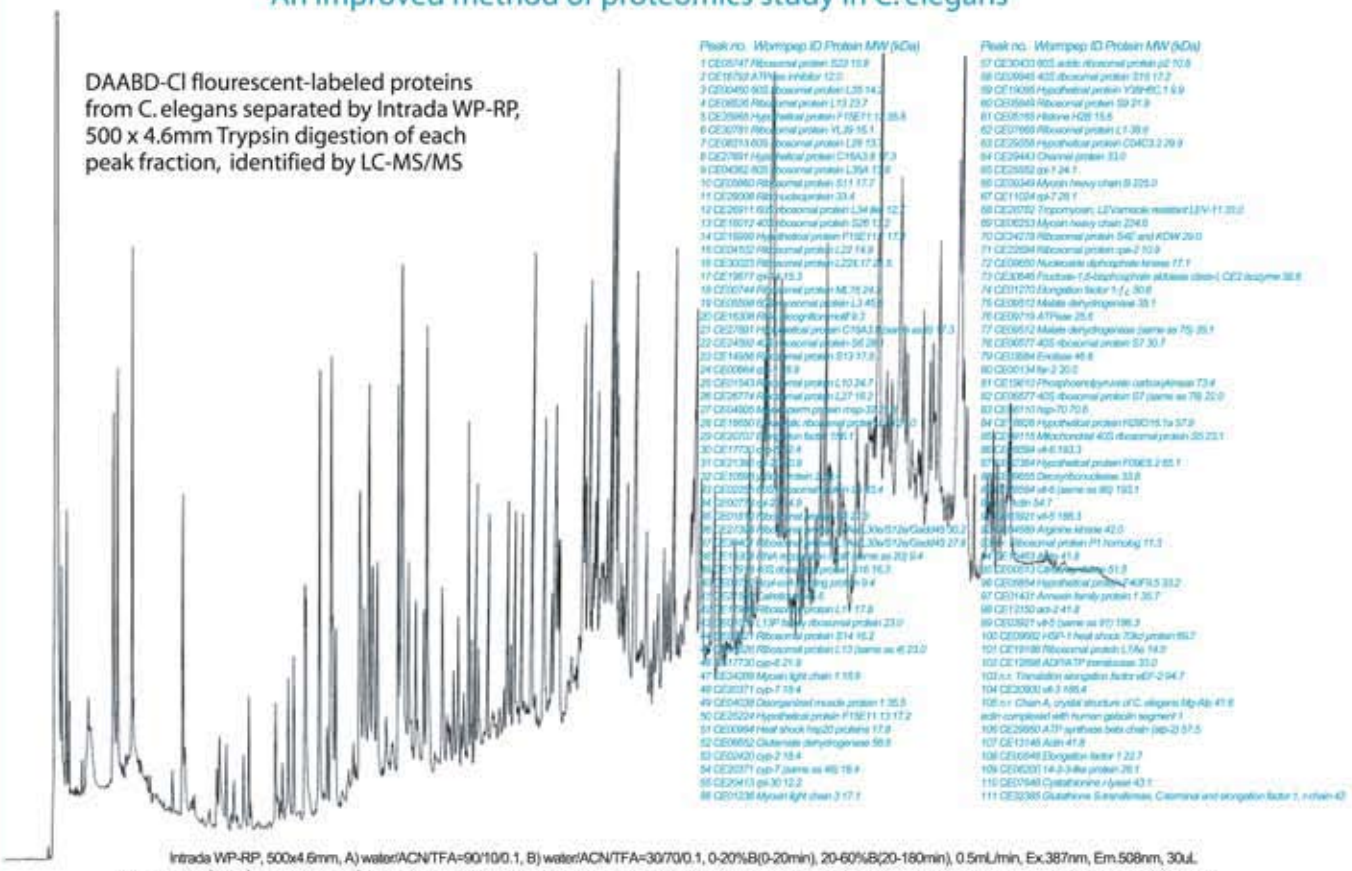


Intrada WP-RP, 250 x 4.6 mm
A: water / TFA = 100 / 0.1
B: acetonitrile / TFA = 100 / 0.07
15-50%B (0-9min), 50%B (9-12min)
1 mL/min (14 MPa),37°C, 220nm

High Resolution Separation of 111 Proteins (9-225 kDa)

An improved method of proteomics study in C. elegans

DAABD-Cl flourescent-labeled proteins from C. elegans separated by Intrada WP-RP, 500 x 4.6mm Trypsin digestion of each peak fraction, identified by LC-MS/MS



Intrada WP-RP, 500x4.6mm, A) water/ACN/TFA=90/10/0.1, B) water/ACN/TFA=30/70/0.1, 0-20%B(0-20min), 20-60%B(20-180min), 0.5mL/min, Ex.387nm, Em.508nm, 30uL

Courtesy of Prof. Imai, Musashino Univ. M.Masuda, H.Saimaru, N.Takamura and K.Imai, Biomed. Chromatogr., 19, 556-560 (2005)

The above chromatogram used a new proteomic analytical method called "fluorescent labeled protein method" with Intrada WP-RP. The 3µm particle, 500mm column provides the ability to separate large numbers of protein.

		Analytical Columns				Semi-Prep Columns	
	Length	Internal Diameter					
	mm	1	2	3	4.6	6	10
INTRADA WP-RP 3 µm Particle Size Stationary Phase	10		WPR20	WPR30	WPR40		
	20		WPR29	WPR39	WPR49		
	30	WPR11	WPR21	WPR31	WPR01	WPR61	WPRP1
	50	WPR12	WPR22	WPR32	WPR02	WPR62	WPRP2
	75	WPR13	WPR23	WPR33	WPR03	WPR63	WPRP3
	100	WPR14	WPR24	WPR34	WPR04	WPR64	WPRP4
	150	WPR15	WPR25	WPR35	WPR05	WPR65	WPRP5
	250	WPR16	WPR26	WPR36	WPR06	WPR66	WPRP6
	500				WPR07		

Guard Cartridges		
1mm	GCWPRC	
2-6mm	GCWPRS	
10mm	GCWPRM	

Guard Holders		
1-6mm	GCH01S	
10mm	GCH02M	