LC Monolithic capillary column

SHINWA EXPRESS _Information_

High resolution monolithic capillary column

ULTRON HF-C4

NEW

Introducing the ULTRON HF-C4 employing a short ligand, the latest addition to the ULTRON HF series. It is known that C4 type ligand is effective for protein separation.

We recommend this column for analysis of intact protein with high reproducibility and high peak capacity.

Features of ULTRON HF-C4

・ Enable to separate non-enzyme digested proteins.

・ Carry-over suppression by deactivation treatment on silica surface.

・ Enable low pressure analysis under mild conditions for proteins.

・ Enable to search for unknown components and simultaneous analysis of protein.

Specifications of ULTRON HF-C4

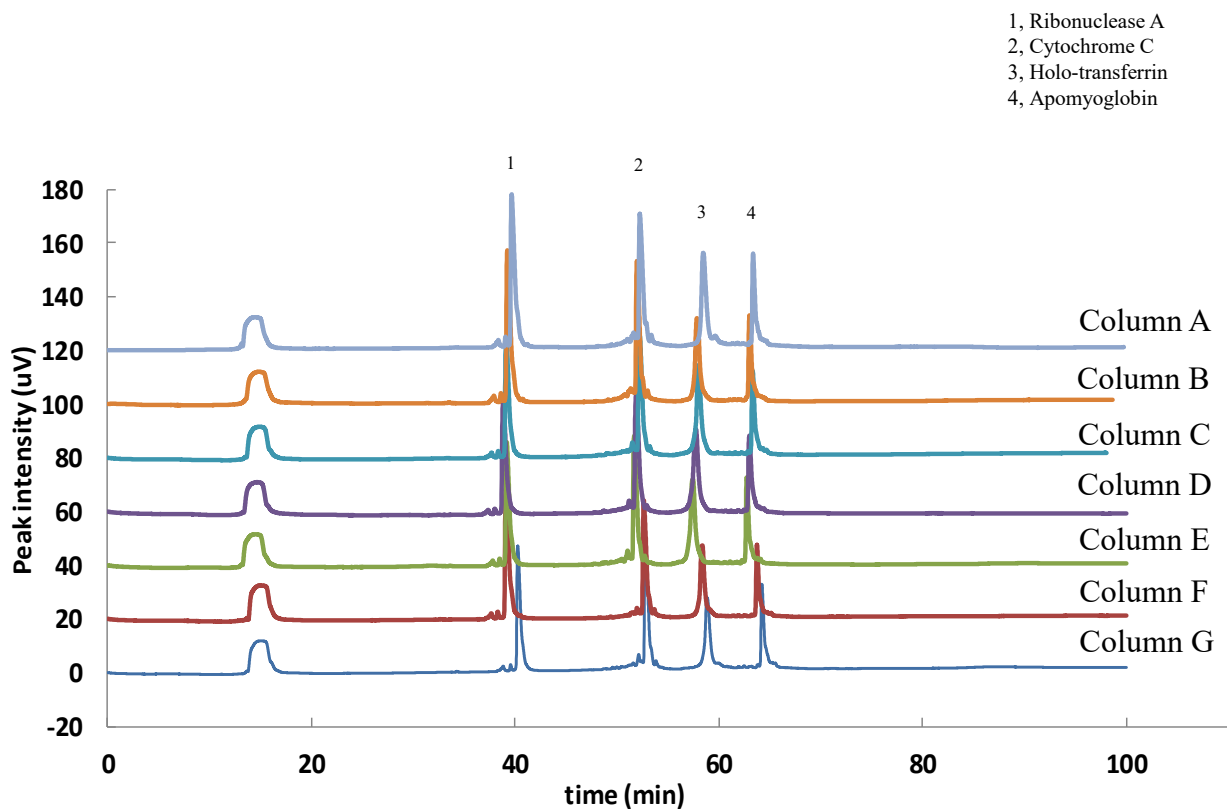|	
Column name	ULTRON HF-C4
Column size (length x inner diameter)	250 mm x 0.1 mm I.D., 700 mm x 0.1 mm I.D.
Applications	Intact protein analysis, high hydrophobic compound analysis
Flow rate range	Recommended range: 300～500 nL/min
pH range	Recommended range: 2.0～8.0
Recommended temperature range	FEP sleeve: 30～50℃ (Max. temp. 50℃) / PEEK sleeve: 30～60℃ (Max. temp. 60℃)
Max allowable pressure	FEP sleeve: 20.0 MPa / PEEK sleeve: 30.0 MPa

Pressure resistant specification (option)

Product name	Price	Specification
PEEK sleeve fitting (inlet side) ※	Please contact us	Max. Pressure: 30 MPa Max. Temp.: 60℃

The outer diameter of the capillary column is 0.38 mm. Please use suitable fittings (Sleeve, Ferrules, etc.) for your Nano Flow LC system. Normally, FEP sleeve fittings are shipped as a standard specification. Pressure resistant fittings (Inlet side: PEEK sleeve) are also available as option with additional cost.

Column-batch reproducibility of ULTRON HF-C4 (protein mixture)

1, Ribonuclease A
2, Cytochrome C
3, Holo-transferrin
4, Apomyoglobin

Analytical condition

Column:	ULTRON HF-C4 700 mm L x 0.1 mm I.D.	Flow rate:	500 nL/min
Mobile phase:	(A) H_2O/TFA = 100/0.1	Column temp.:	50℃
	(B) CH_3CN/TFA = 100/0.1	Detection:	UV-214 nm
Gradient:	(B) 10-55% (0-90 min) 55-95% (90-91 min) 95% hold (91-105 min) 10% hold (105-130 min)		
Sample:	HPLC protein standard mixture analytical standard (Sigma-Aldrich) (20 µg/mL)		
Injection vol.:	0.5 µl	System: UltiMate 3000 RSLCnano (Dionex)	

Reproducibility results (retention time)

	Protein sample			
	Ribonuclease A	Cytochrome C	Holo-transferrin	Apomyoglobin
Average（min）	39.3	52.2	58.1	63.3
RSD（%）	1.29	0.87	0.90	0.87

Please be aware that specifications are subject to change without prior notification.