

## Shodex® GFC Phases

## Aqueous SEC (GFC) Phases

Column Series	Base Material	Functional Group	Comments/Applications
PROTEIN KW	Silica	Hydrophilic polymer	Analysis of high MW biological fluids. Suitable for separating proteins of MW few thousand to few million Da
OHpak SB	Polyhydroxymethacrylate	-	Analysis of water-soluble samples and for molecular weight distribution

PROTEIN KW-800 and KW400 are silica based series with high protein recovery rates. Whereas the KW-800 columns have the highest sample loading, the reduced particle size of KW400 columns enable 3-4 times greater sensitivity. Figure 5 illustrates the enhanced sensitivity achieved for a range of proteins with a KW400 column.

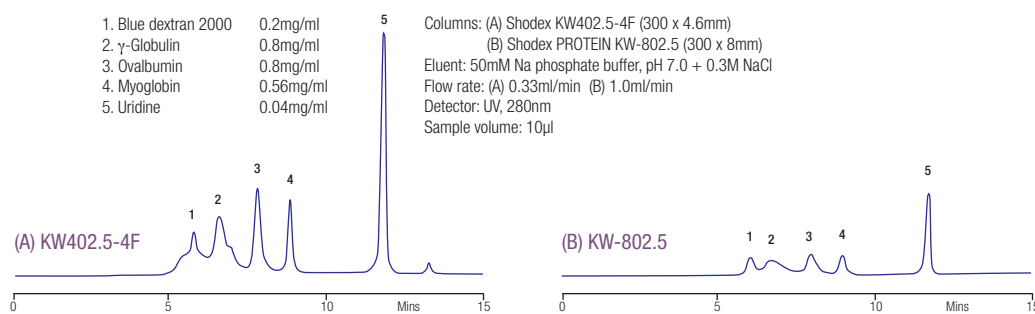


Figure 5. Comparison between KW400 and KW-800 columns

The OHpak SB-800 and SB400 series are based on polyhydroxymethacrylate and are used for the analysis of a wide range of molecular weight compounds.

## Ordering Information – GFC Columns

PROTEIN Product	Particle Size (µm)	Pore Size (Å)		Exclusion Limit (Da)		Column Dimensions (mm)	Catalogue No.	Price
		Average	Maximum	Pullulan	Protein			
KW-802.5	5	150	400	60,000	150,000	300 x 8.0	F6989000	
KW-803	5	300	1,000	170,000	700,000	300 x 8.0	F6989103	
KW-804	7	500	1,500	500,000	1,000,000	300 x 8.0	F6989104	
KW-G	7	Guard column				50 x 6.0	F6700131	
KW402.5-4F	3	150	400	60,000	150,000	300 x 4.6	F6989201	
KW403-4F	3	250	800	150,000	600,000	300 x 4.6	F6989202	
KW404-4F	5	500	1,500	500,000	1,000,000	300 x 4.6	F6989203	
KW405-4F	5	700	2,000	1,300,000	20,000,000	300 x 4.6	F6989204	
KW400G-4A	5	Guard column				10 x 4.6	F6700132	

OHpak Product	Particle Size (µm)	Pore Size (Å) (Maximum)	Exclusion Limit (Da)		Column Dimensions (mm)	Catalogue No.	Price	
			Pullulan	Protein				
SB-802 HQ	8	100	4,000		300 x 8.0	F6429100		
SB-802.5 HQ	6	200	10,000		300 x 8.0	F6429101		
SB-803 HQ	6	800	100,000		300 x 8.0	F6429102		
SB-804 HQ	10	2,000	1,000,000		300 x 8.0	F6429103		
SB-805 HQ	13	7,000	4,000,000		300 x 8.0	F6429104		
SB-806 HQ	13	15,000	20,000,000		300 x 8.0	F6429105		
SB-806M HQ	13	15,000	20,000,000		300 x 8.0	F6429106		
SB-G	10	Guard column				50 x 6.0	F6709430	
SB-807 HQ	35	30,000	500,000,000		300 x 8.0	F6429108		
SB-807G	35	Guard column				50 x 8.0	F6709431	
SB401-4E	10	40	1,000		250 x 4.6	F6429111		
SB402.5-4E	6	200	10,000		250 x 4.6	F6429112		
SB403-4E	6	800	100,000		250 x 4.6	F6429113		
SB404-4E	7	2,000	1,000,000		250 x 4.6	F6429114		
SB400G-4A	7	Guard column				10 x 4.6	F6709432	

## Other Shodex® Phases

### Aqueous/Organic SEC Phases

Column Series	Base Material	Functional Group	Comments/Applications
Asahipak GF	Polyvinyl alcohol	None	Both water and organic solvents can be used. Suitable for samples with both hydrophilic and hydrophobic moieties.

The Asahipak GF Series columns are based on polyvinyl alcohol and can be used with both aqueous and organic solvents. Please enquire for further details and ordering information for aqueous/organic SEC phases.

### Organic SEC (GPC) Phases

Column Series	Base Material	Functional Group	Comments/Applications
GPC KF, K, KD, HFIP, LF, HT, UT, AT	Styrene-divinylbenzene	None	KF-800 series shipped in THF. K-800 series shipped in CHCl <sub>3</sub> . KD-800 series shipped in DMF – suitable for assay of polar polymers. HFIP suitable for engineering plastics eg. PET, polyamides. HT, UT and AT series for higher temperature GPC.

Please enquire for further details and ordering information for organic SEC (GPC) phases.

Please contact Hichrom for further information on any Shodex column and for ordering information for columns not listed.

