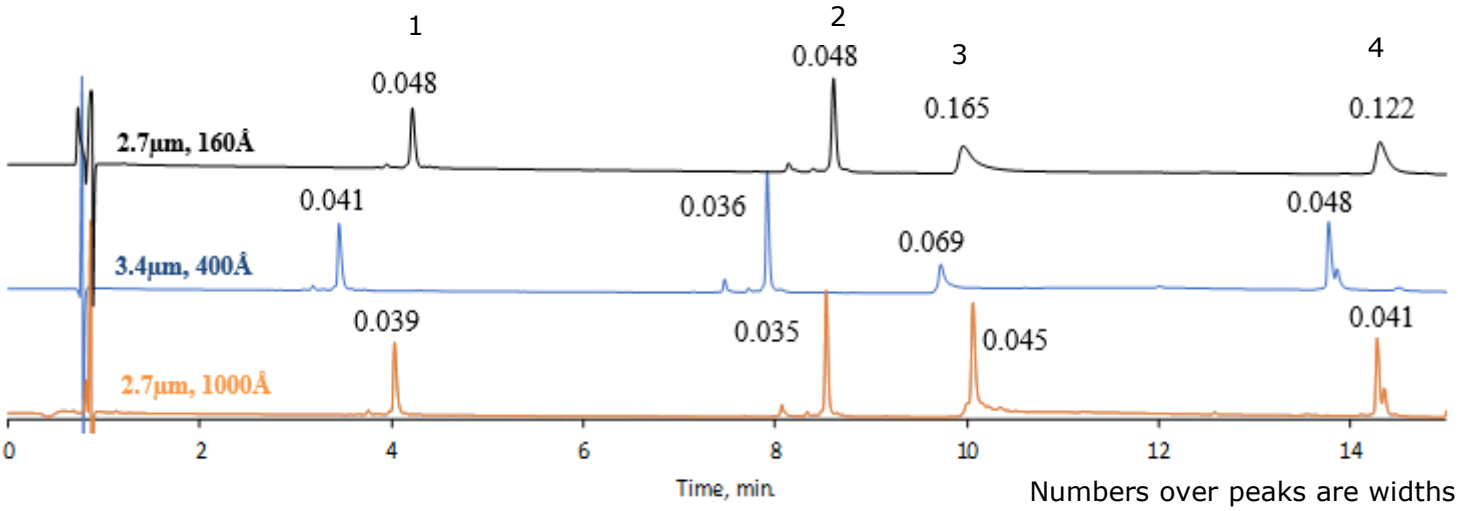
UHPLC Analysis of Proteins on BIOshell™ A160 Peptide C18 2.7 µm; BIOshell™ A400 Protein C18, 3.4 µm; and BIOshell™ IgG 1000 Å C18, 2.7 µm



Numbers over peaks are widths at half height in minutes

Conditions:

column: BIOshell™ A160 Peptide C18, 15 cm x 2.1 mm I.D., 2.7 µm;
BIOshell™ A400 Protein C18, 15 cm x 2.1 mm I.D., 3.4 µm;
BIOshell™ IgG 1000 Å C18, 15 cm x 2.1 mm I.D., 2.7 µm;

mobile phase: [A] Water (0.1% v/v trifluoroacetic acid);
[B] 20:80 Water:Acetonitrile (0.085% v/v trifluoroacetic acid)

gradient: 27% B to 60% B in 15 min

flow rate: 0.4 mL/min

column temp.: 60 °C

detector: UV, 280 nm

injection: 4 µL

sample: Proteins, varied concentration, water (0.1% v/v trifluoroacetic acid)

Peak Number	Compound
1	Ribonuclease A (13.8 kDa)
2	Lysozyme (14.4 kDa)
3	SILu™ Lite SigmaMAb Antibody (~150 kDa)
4	Enolase (46.7 kDa)

Description:

Pore size is an important factor in choosing the optimal column for a given separation. As seen in this application, peak widths decrease as the pore size of the column packing increases. This effect is even more dramatic for larger molecules, such as monoclonal antibodies. For molecules ranging from 100 Da to 15 kDa, the 160 Å pore size is recommended. For molecules ranging from 2 kDa to 500 kDa, the 400 Å pore size is recommended. For molecules over 50 kDa, 1000 Å pores are optimal.

Materials:

Product Part Number	Description
66905-U	BIOshell™ A160 Peptide C18, 15 cm x 2.1 mm I.D., 2.7 µm
67469-U	BIOshell™ A400 Protein C18, 15 cm x 2.1 mm I.D., 3.4 µm
582703-U	BIOshell™ IgG 1000 Å C18, 15 cm x 2.1 mm I.D., 2.7 µm
R5500	Ribonuclease A from bovine pancreas
L6876	Lysozyme from chicken egg white
MSQC4	SILu™ Lite SigmaMAb Antibody
E6126	Enolase from baker's yeast (*S. cerevisiae*)
270733	Water
34851	Acetonitrile
302031	Trifluoroacetic acid