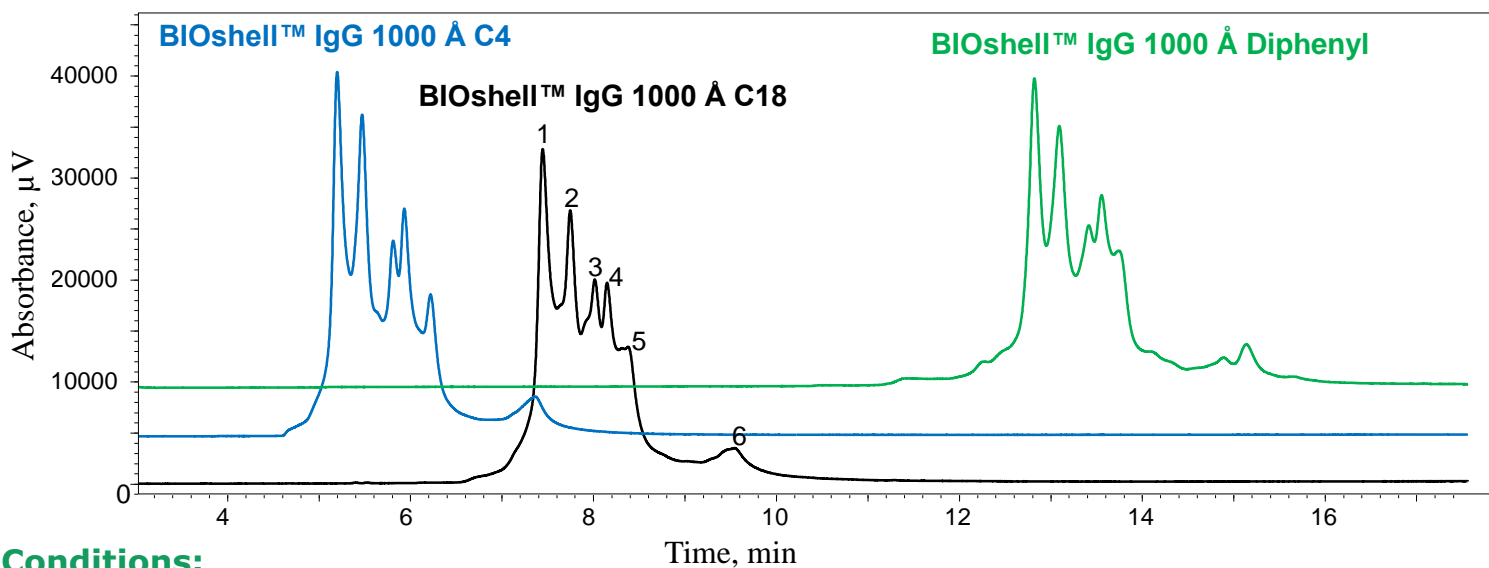




UHPLC Analysis of IgG2 on BIOshell™ IgG 1000 Å C4, C18, and Diphenyl, 2.7 µm



Conditions:

column: BIOshell™ IgG 1000 Å C4, 15 cm x 2.1 mm I.D., 2.7 µm; BIOshell™ IgG 1000 Å C18, 15 cm x 2.1 mm I.D., 2.7 µm; BIOshell™ IgG 1000 Å Diphenyl, 15 cm x 2.1 mm I.D., 2.7 µm

mobile phase: [A] 2:10:88 n-propanol/acetonitrile/water (0.1% v/v difluoroacetic acid); [B] 70:20:10 n-propanol/acetonitrile/water (0.1% v/v difluoroacetic acid)

gradient: 16% B to 26% B in 20 min

flow rate: 0.2 mL/min

column temp.: 80 °C

detector: UV, 280 nm

injection: 2 µL

sample: Denosumab, 2 mg/mL, water (0.1% v/v trifluoroacetic acid)

Peak Number	Compound
1	IgG2-B
2	IgG2-B
3	IgG2-A/B
4	IgG2-A/B
5	IgG2-A
6	IgG2-A

Description:

Denosumab is a monoclonal antibody used to treat osteoporosis, hypercalcemia, and bone cancer. The BIOshell™ IgG 1000 Å C4, C18, and Diphenyl phases have unique selectivity for monoclonal antibodies such as denosumab. Each phase is able to successfully separate the disulfide bridge isoforms of the IgG2. Since the retention varies between the three phases, it is recommended to screen them to find the optimal choice for a given monoclonal antibody.

Materials:

Product Part Number	Description
63289-U	BIOshell™ IgG 1000 Å C4, 15 cm x 2.1 mm I.D., 2.7 µm
582703-U	BIOshell™ IgG 1000 Å C18, 15 cm x 2.1 mm I.D., 2.7 µm
577421-U	BIOshell™ IgG 1000 Å Diphenyl, 15 cm x 2.1 mm I.D., 2.7 µm
00922	Difluoroacetic acid
302031	Trifluoroacetic acid
34871	N-propanol
34851	Acetonitrile
270733	Water

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