

AppliChrom® ABOA-ProteSep S-L 5 μ

AppliChrom® Chromatography columns for highly efficient size exclusion chromatography (GPC/SEC) of biopolymers

(especially sugars, proteins, immunoglobulins)

AppliChrom® ABOA-ProteSep S-L 5 μ columns are designed for fast and accurate GPC/SEC separation of proteins, immunoglobulins and polymeric sugars in the range of 5.000 -1.200.000 dalton.

In order to ensure optimal separation results in GPC/SEC-separations of biopolymers, the specially optimised 5 μ particles with their proprietary pore opening and structure was designed. From smaller biopolymers (e.g. Vitamin B12) up to very large biopolymers (immunoglobulins and proteins up to 1.200.000D) excellent separations were observed. A very fast exchange in the kinetics of the analytes between pore volume and the mobile phase allows for fast separations with a high resolution.

The **AppliChrom® ABOA-ProteSep S-L 5 μ** columns have connections that are compatible with the standard fittings of analytical HPLC systems (10 / 32 fittings at 1 / 16" capillary).

High pressure stability (300bar) allows for relatively high linear flow rates. This results in an analysis time of 10-20 min for a 300x8mm column, which is operated with a flow rate of 1.0 to 0.5ml / min. The chromatographic core material is a shape stable spherical inorganic material covered with a special organic biosurface that neither swells nor shrinks with organic eluent (e.g. DMSO, MeOH or THF).

The recommended eluents are aqueous, buffered in the pH range 3 to 7.5.

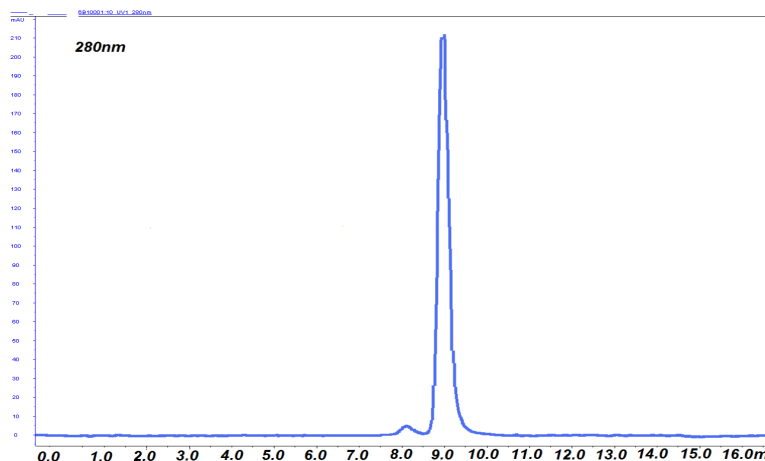
Depending on the molecules that are analysed, the eluent is adjusted. Proteins usually work well within 0.2M buffer or buffer / salt solutions, polymeric sugars often require only 0.05% strength salt solutions. In some cases, the addition of organic modifier is recommended, for example MeOH or ACN (10-30%) -. do not hesitate in asking your AppliChrom® service team for more information at info@applichrom.de.

The advantageous combination of AppliChrom® ABOA ProteSep S-L materials (high pressure stability, no swelling or shrinkage with organic eluent) aids, for example, after a long application of cleaning processes, using organic solvents columns under as DMSO or THF. This in turn ensures an increased service life of the column, saving additional time and money for the user. For the protection of the main column, guard columns are available - ask your AppliChrom® Service Team for more information.

AppliChrom ABOA ProteSep S-L columns –

The first choice for biopolymeranalysis (5.000-1.200.000D).

- high resolution
- cost efficient
- accurate



IgG Monomer 150 kD

IgG Dimer 300kD

Experimental: Buffer 0.05 M Na₂HPO₄, 0.05 M NaH₂PO₄, 0.15 M NaCl, pH 6.8
 AppliChrom ABOA ProteSep S-L column 300 x 8 mm (SAP-S-L 3008)
 Flowrate 1.0 ml/min, sample volume 20 µl, detection UV @ 280 nm; 1.0 AUFS

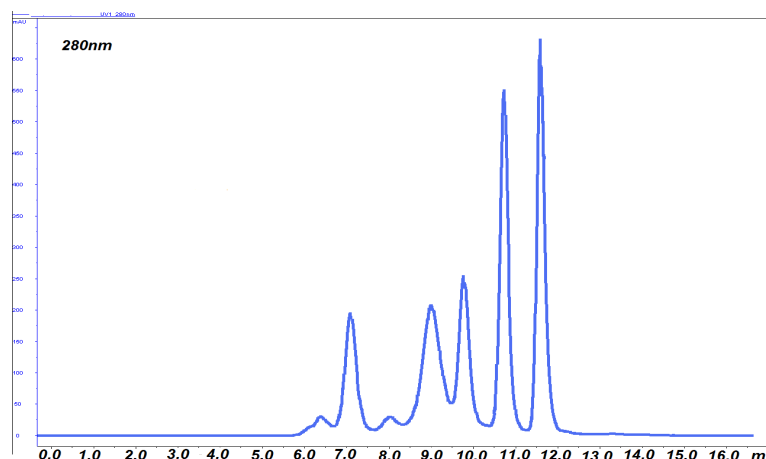
Thyroglobulin (bovine) 670,000

γ-Globulin (bovine) 158,000

Ovalbumin (chicken) 44,000

Myoglobin (horse) 17,000

Vitamin B12 1,350



Column dimension	Order No.
8 x 250mm	SAP-S-L 2508
8 x 300mm	SAP-S-L 3008
20 x 250mm	SAP-S-L 25020
20 x 300mm	SAP-S-L 30020

Precolumns and other column dimensions are also available. Please ask for your individualised offer.

For additional informations regarding to techniques, delivery times or for contact data of your local distributor, please write a mail to: info@applichrom.de.

Version Feb.2010, subject to change.