

Separation of Ovalbumin & Soyabean Trypsin Inhibitor

PL-SAX 1000Å

Advantage Statement: For globular protein analysis and purification, PL-SAX 1000Å material has the optimum pore size for maximum loading with low band broadening.

PL-SAX is a hydrophilic strong anion exchange chromatographic packing material from Varian, Inc. The combination of the rigid macroporous polystyrene/divinylbenzene (PS/DVB) polymer matrix and chemically stable quaternized polyethyleneimine coating allows the analysis of biomolecules over a wide range of mobile phase conditions and pH. The physical stability of the media permits their use with high eluent flow rates and high speed gradients for very rapid separations. This excellent stability ensures both rapid equilibration between separations and the use of aggressive clean-up procedures employing high salt, NaOH, mineral and organic acids, and a wide range of organic solvents. The quaternary amine functionality and pH stability of the PL-SAX adsorbent enables anion exchange separations to be carried out at high pH.

Figure 1 shows the separation of ovalbumin and soyabean trypsin inhibitor at three representative flow rates with resolution factors for their separation calculated for different flow rates, shown in Table 1.

Column: PL-SAX 1000Å 8 µm
Buffer: 0.01 M Tris, pH 8, eluting salt NaCl

$$R_s = \frac{2(t_2 - t_1)}{w_2 + w_1}$$

Table 1. Resolution factors calculated for different flow rates.

Flow Rate (mL/min)	R_s
0.5	3.79
1.0	4.27
1.5	4.46
2.0	3.68
3.0	3.37
4.0	3.09

These data represent typical results. For further information, contact your local Varian Sales Office.

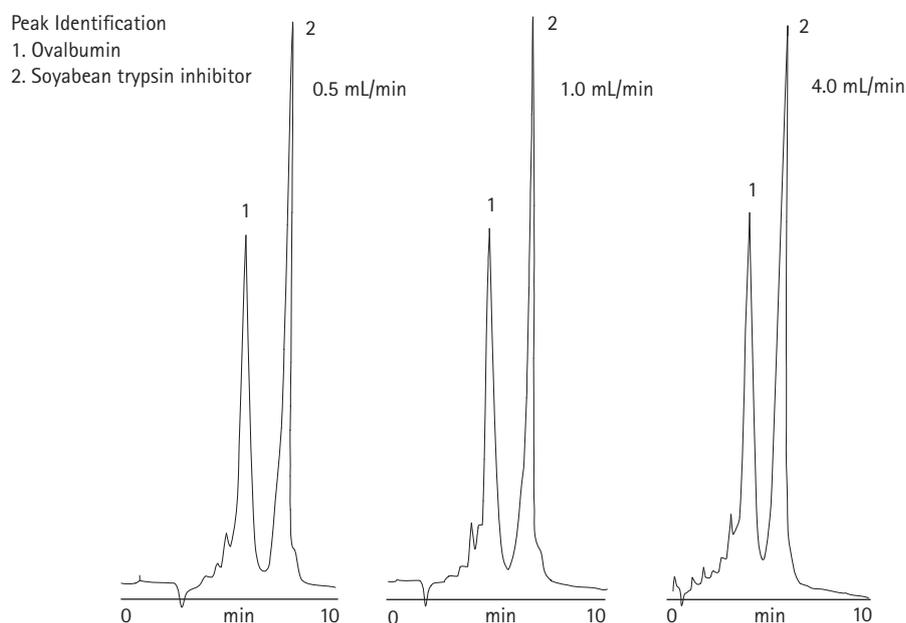


Figure 1. Separation of ovalbumin and soyabean trypsin inhibitor at three representative flow rates.

NOTICE: Varian, Inc. was acquired by Agilent Technologies in May 2010. This document is provided as a courtesy but is no longer kept current and thus will contain historical references to Varian. For more information, go to www.agilent.com/chem.



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