Ion Exchange Chromatography Simulation of Lysozyme by Aspen Chromatography

Jung Ae Kim, In Ho Kim*

Department of Chemical Engineering, Chungnam National University 220, Gung-dong, Yuseong-gu, Deajeon 305-764, Korea TEL: +82-42-821-7675, FAX: +82-42-822-8995

E-mail: inkim@cnu.ac.kr*

Lysozyme is an important antibacterial material, as effective food preservative. A number of lysozymes are found in nature in human tears and egg white, which about 3.5% of egg proteins.

Cation exchange chromatography has been used commercially for separation of lysozyme. An optimization study was theoretically performed for saving time and cost in separation and purification process. Important parameters in ion exchange chromatography were sample loading amount, flow rate, elution gradient, and elution volume. Aspen Chromatography simulator was used to compare chromatograms with the change of parameters as well as determine an optimal conditions.

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References

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