

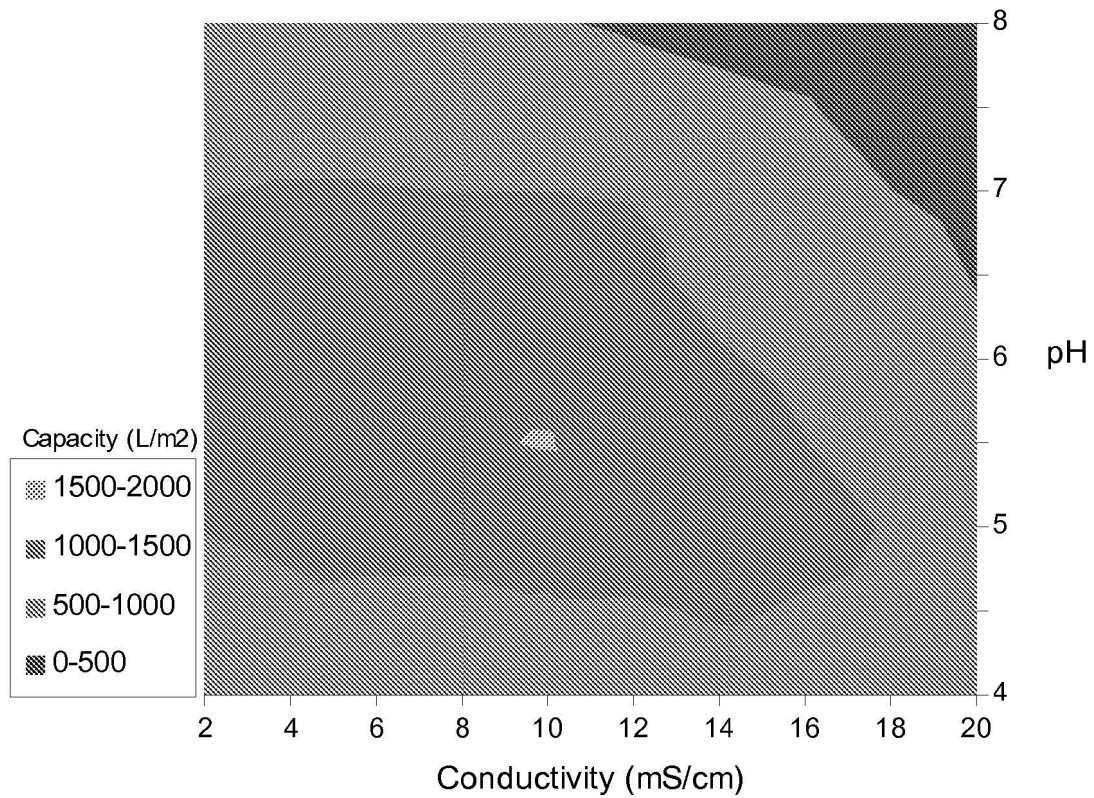


Figure 1. Throughput of a virus filter Viresolve® Pro using a negatively charged prefilter Viresolve® Pro Shield using feed solutions at different pH and conductivity values.

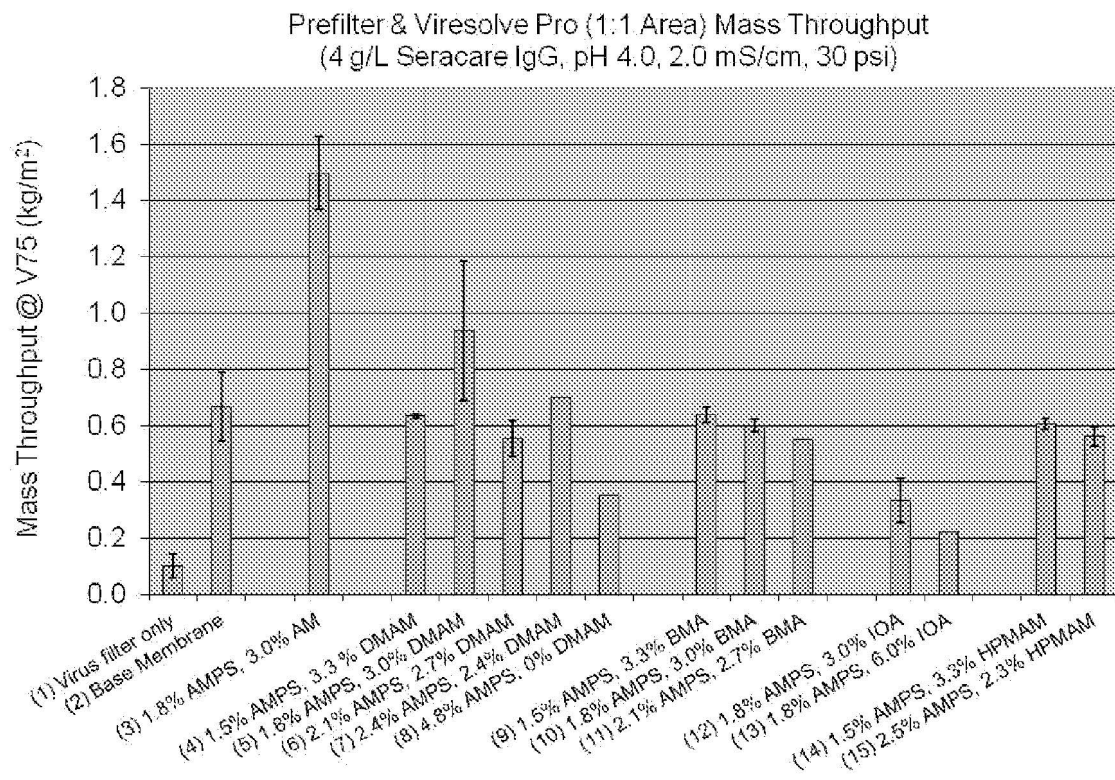


Figure 2. Mass throughputs of Viresolve Pro (VPro) using new adsorptive membranes as prefilters.

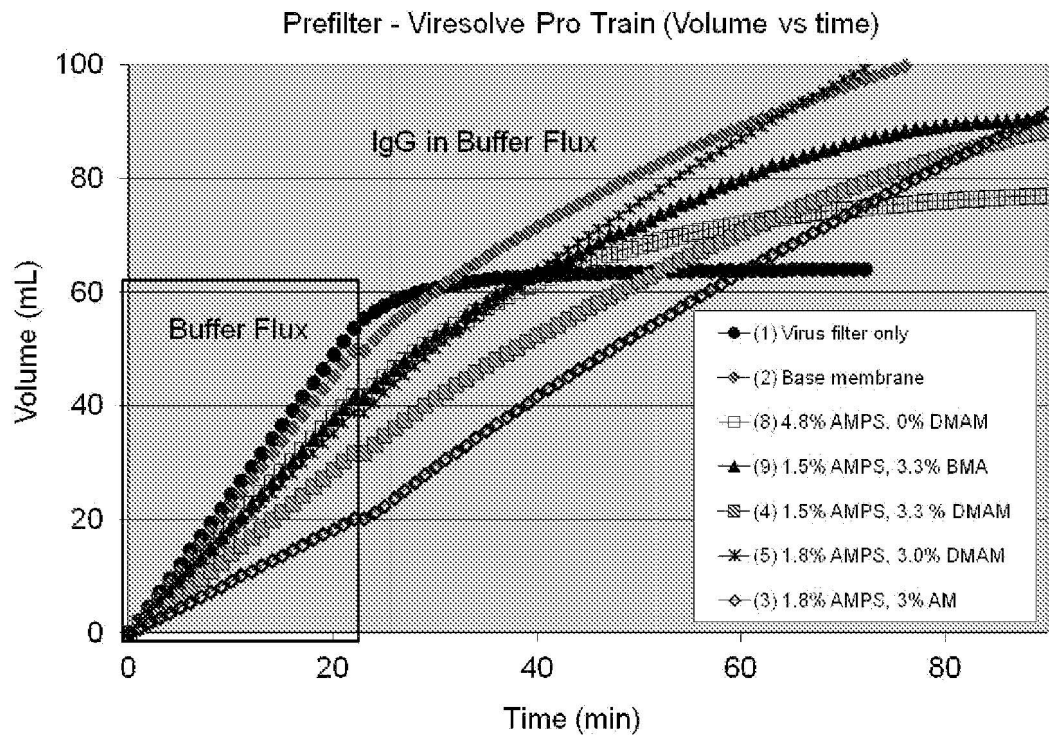


Figure 3. Volume vs. Time curves for buffer and protein solutions for various prefilter/VPro combinations. Slopes of the curves correspond to permeabilities.

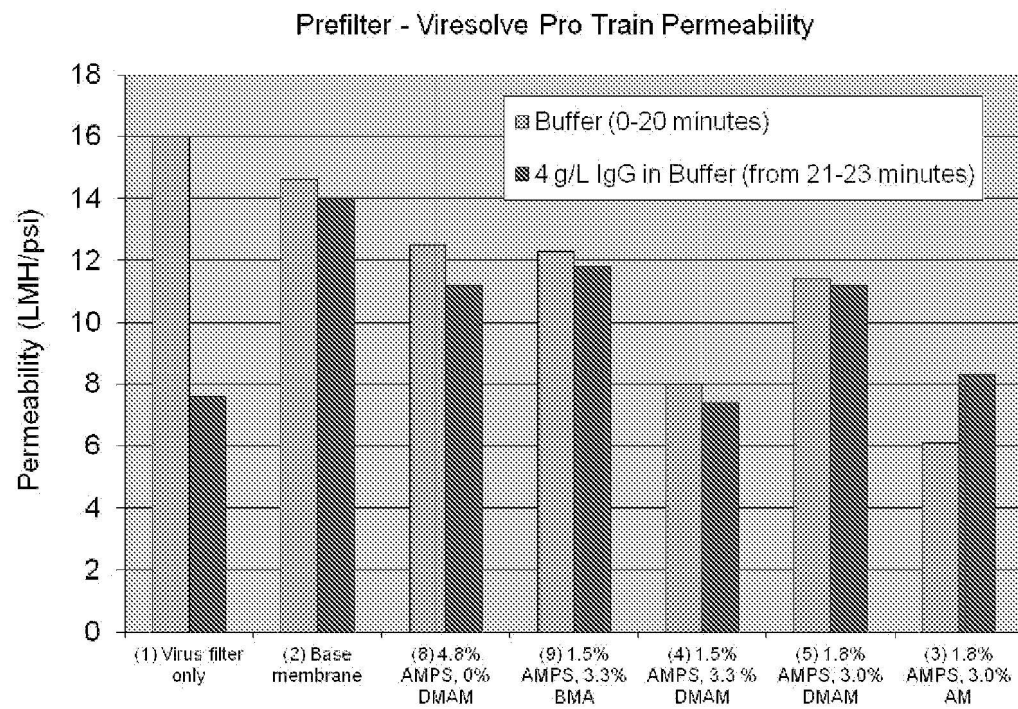


Figure 4. Permeability changes of buffer and protein solution of various prefilter/VPro combinations.

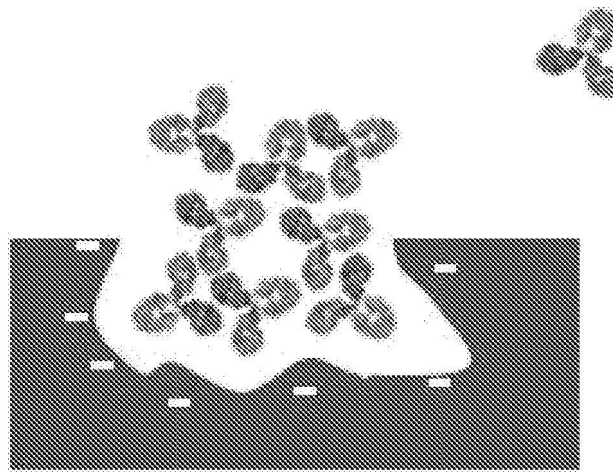


Figure 5. Illustration of a possible mechanism of IgG aggregate interaction with the membrane surface containing Acrylamide.

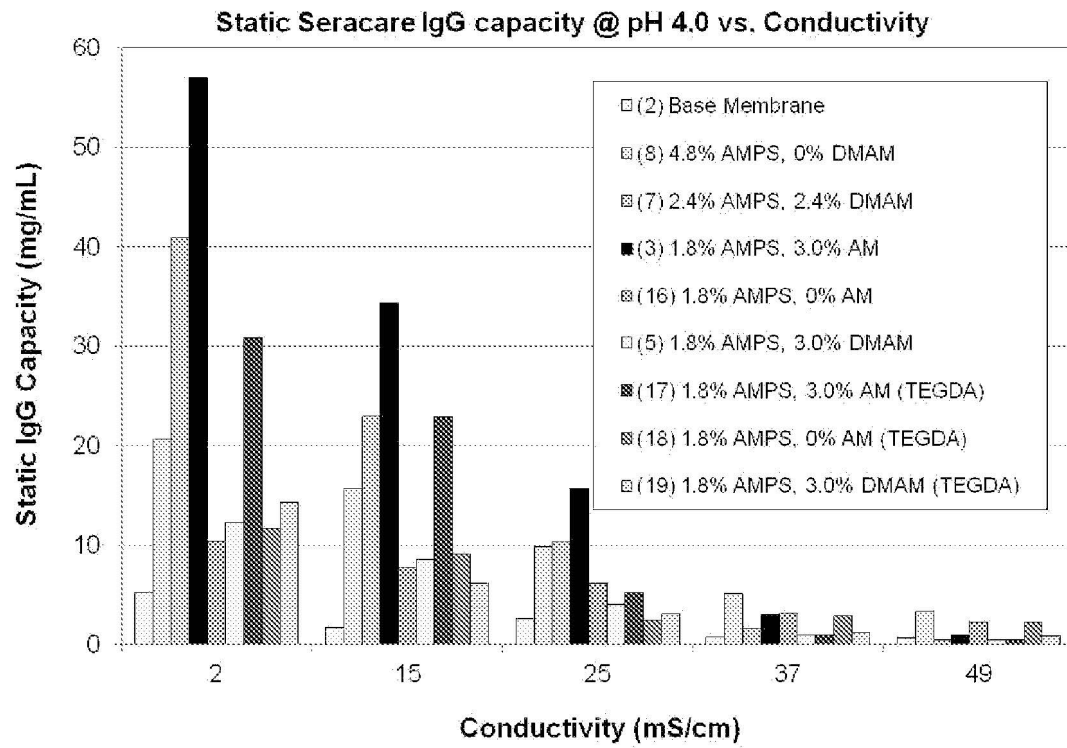


Figure 6. Static binding capacities for IgG of various CEX surface-modified membranes.

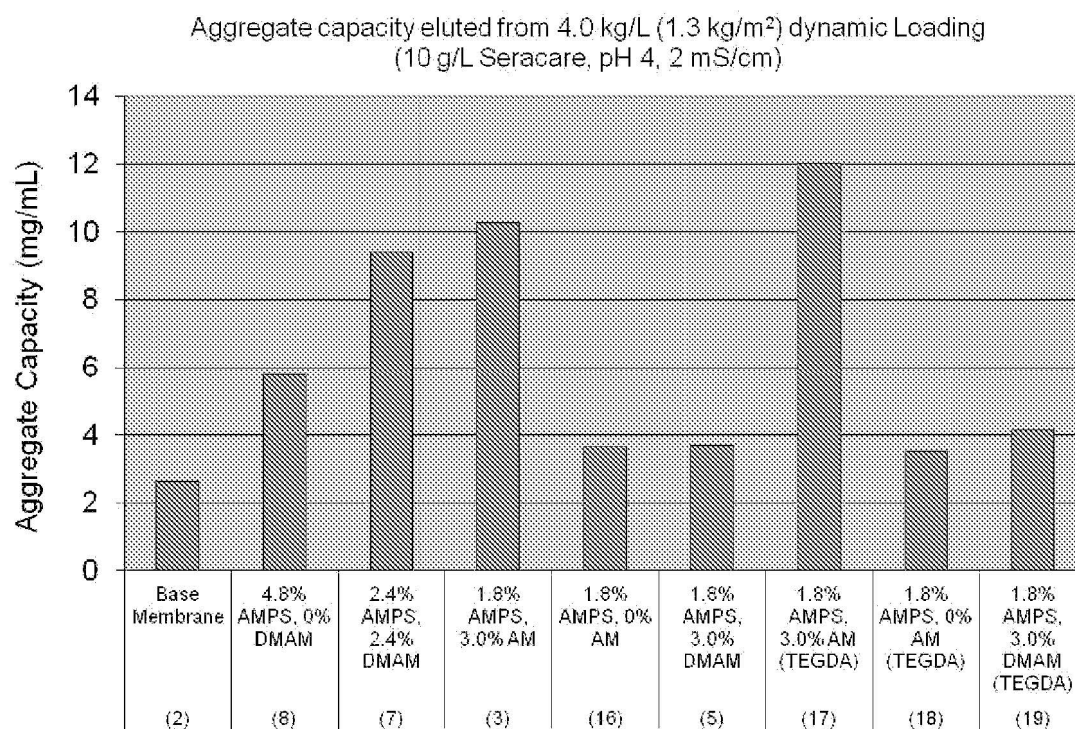


Figure 7. Aggregate binding capacities for IgG of various CEX surface-modified membranes.

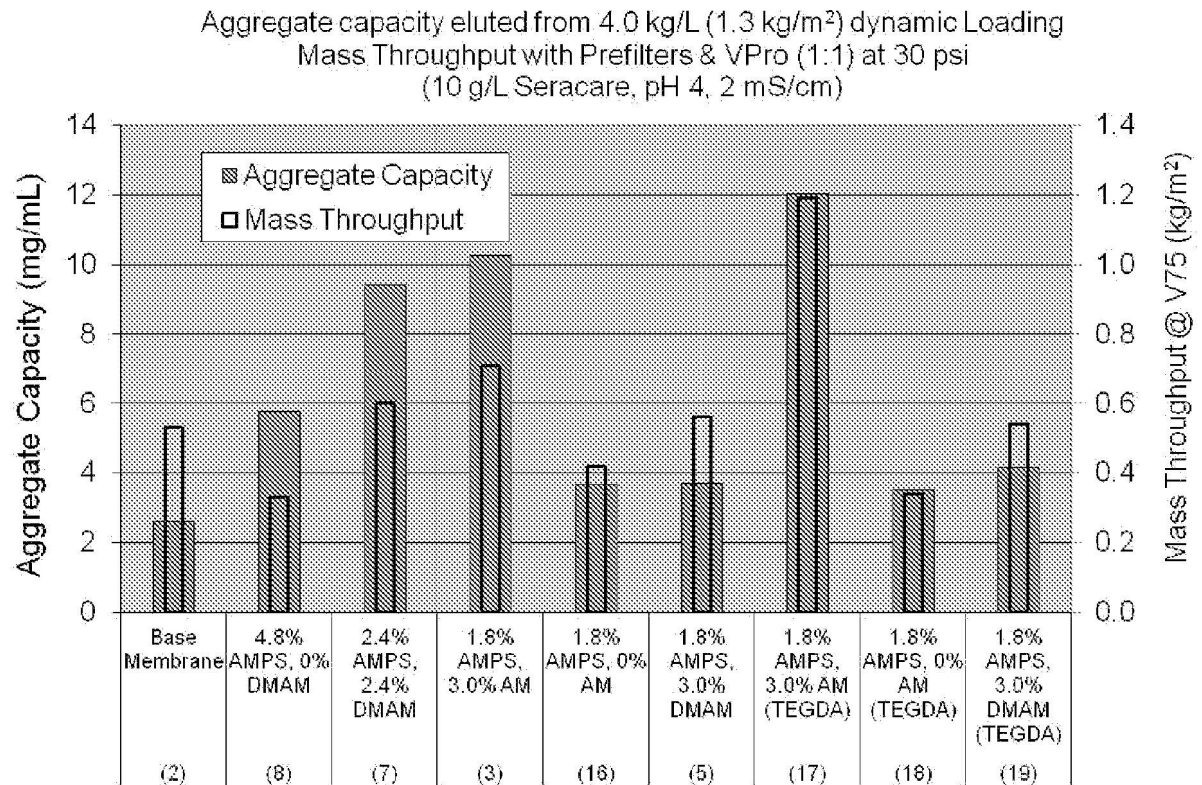


Figure 8. Aggregate binding capacities for IgG of various CEX surface-modified membranes and corresponding VPro throughput.

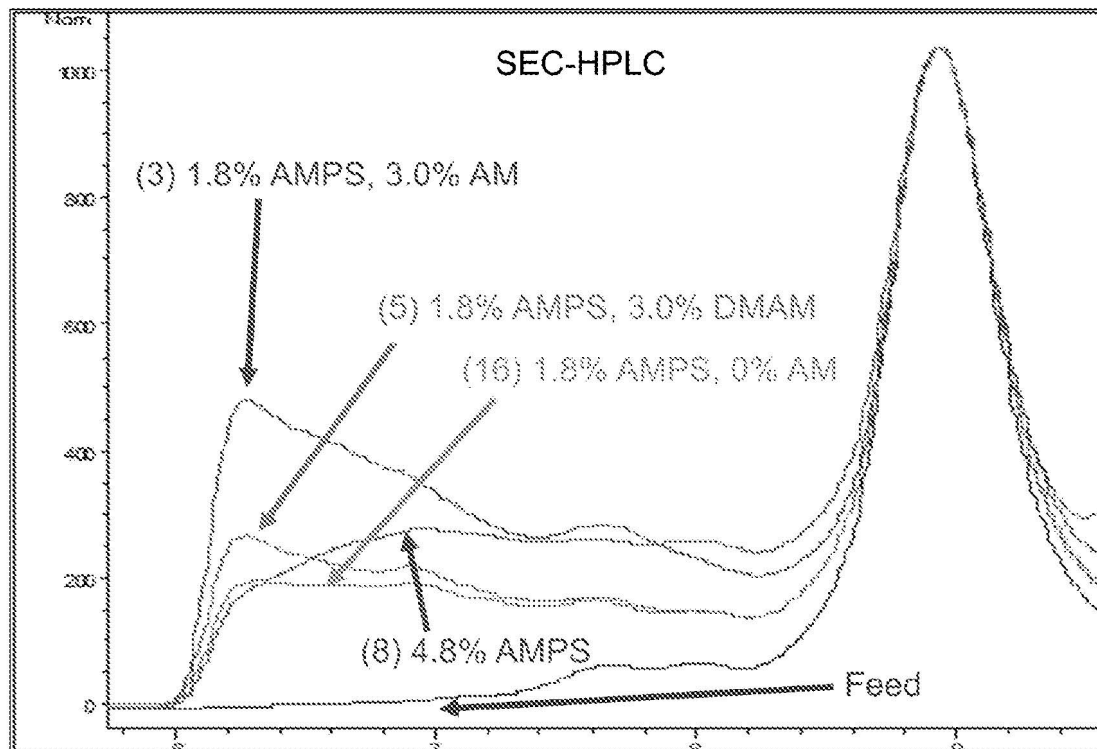


Figure 9. SEC chromatograms of elution IgG samples of various CEX surface-modified membranes.

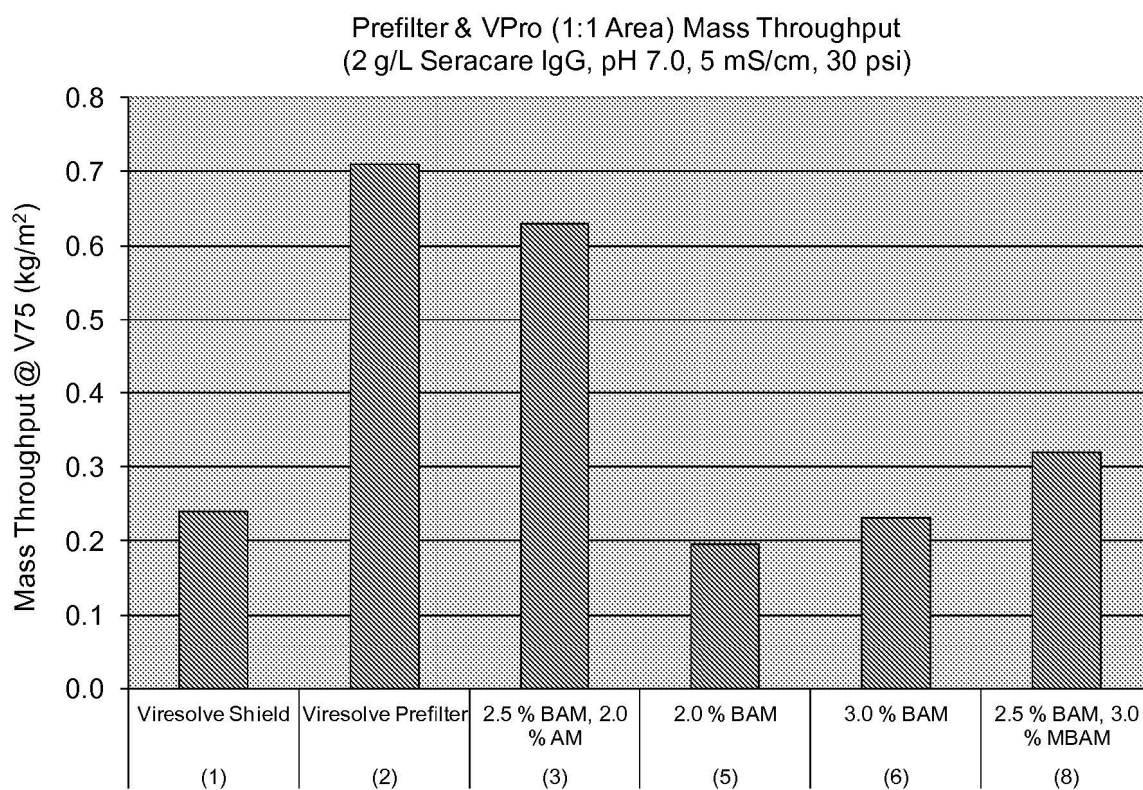


Figure 10. Performance of Acrylamide-containing hydrophobic prefilters in comparison to currently available commercial prefilters and prefilters without Acrylamide at pH 7.0, 5 mS/cm.

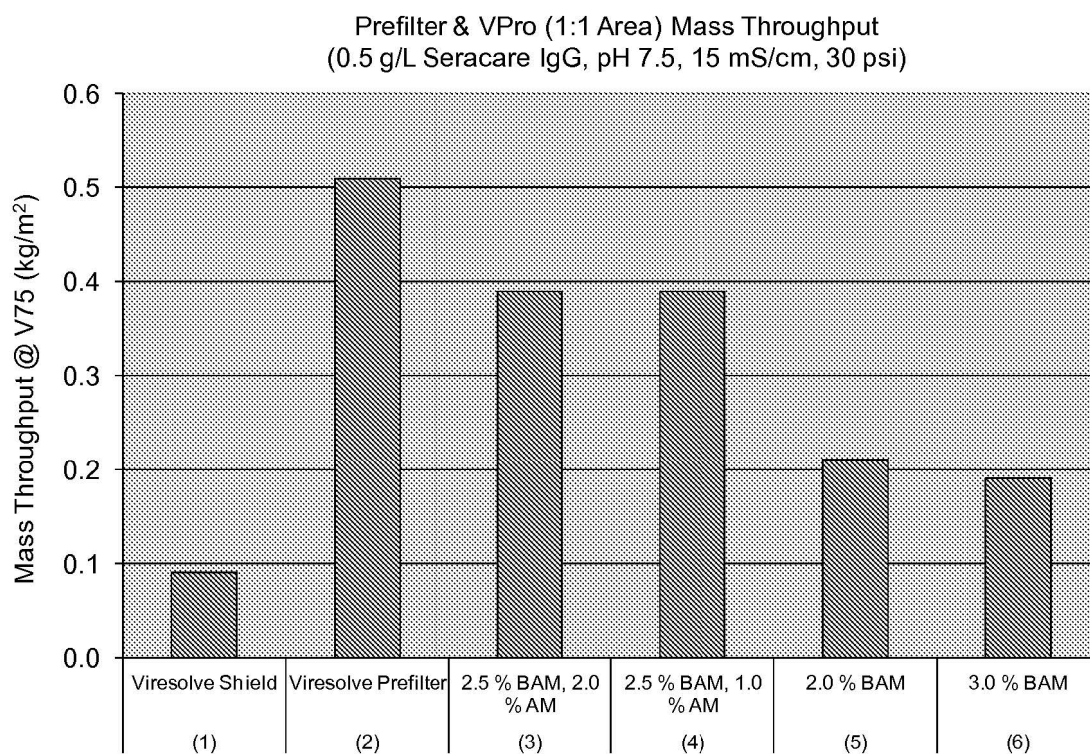


Figure 11. Performance of Acrylamide-containing hydrophobic prefilters in comparison to currently available commercial prefilters and prefilters without Acrylamide at pH 7.5, 15 mS/cm.

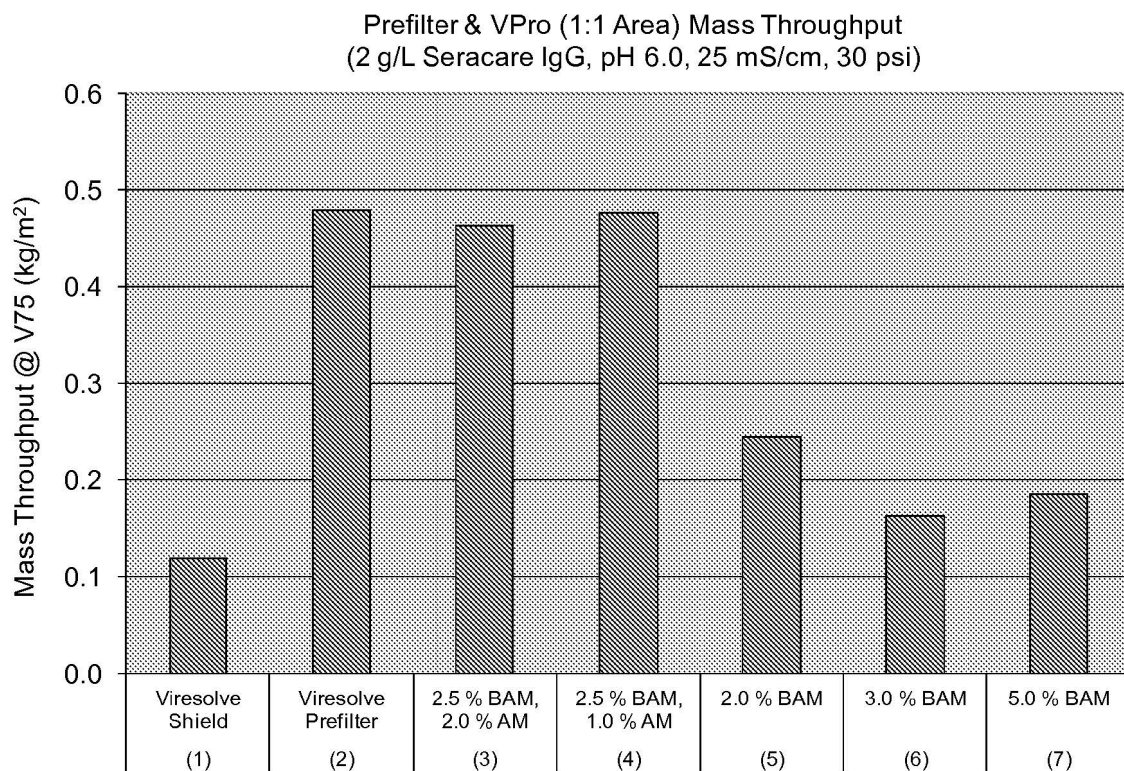


Figure 12. Performance of Acrylamide-containing hydrophobic prefilters in comparison to currently available commercial prefilters and prefilters without Acrylamide at pH 6.0, 25 mS/cm.

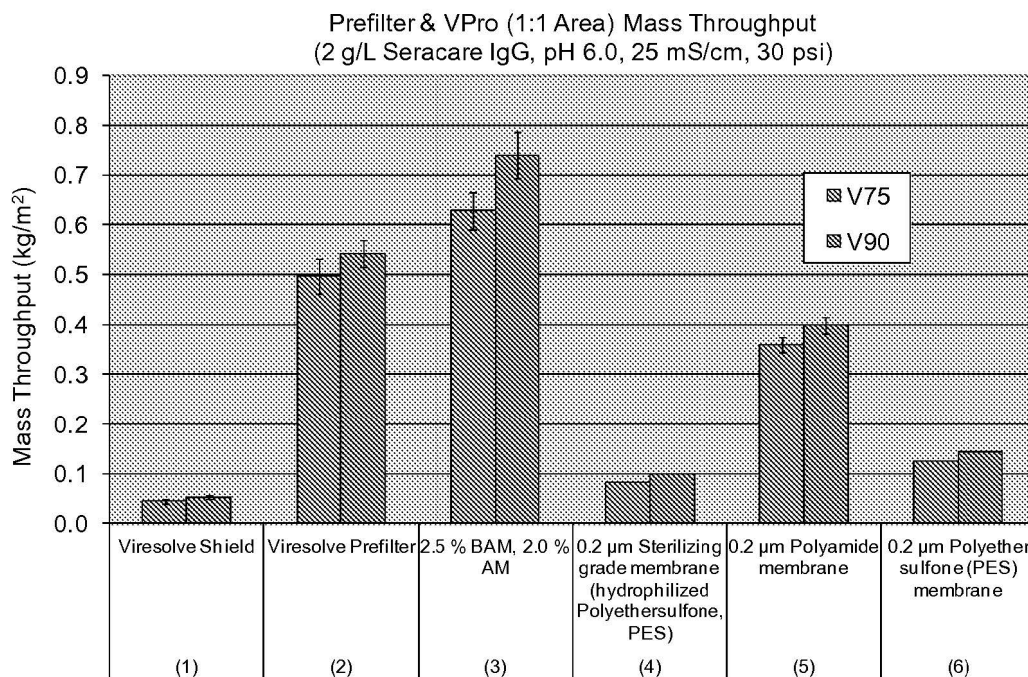


Figure 13. Performance of Acrylamide-containing hydrophobic prefilter in comparison to currently available commercial prefilters and unmodified base membranes at pH 6.0, 25 mS/cm.

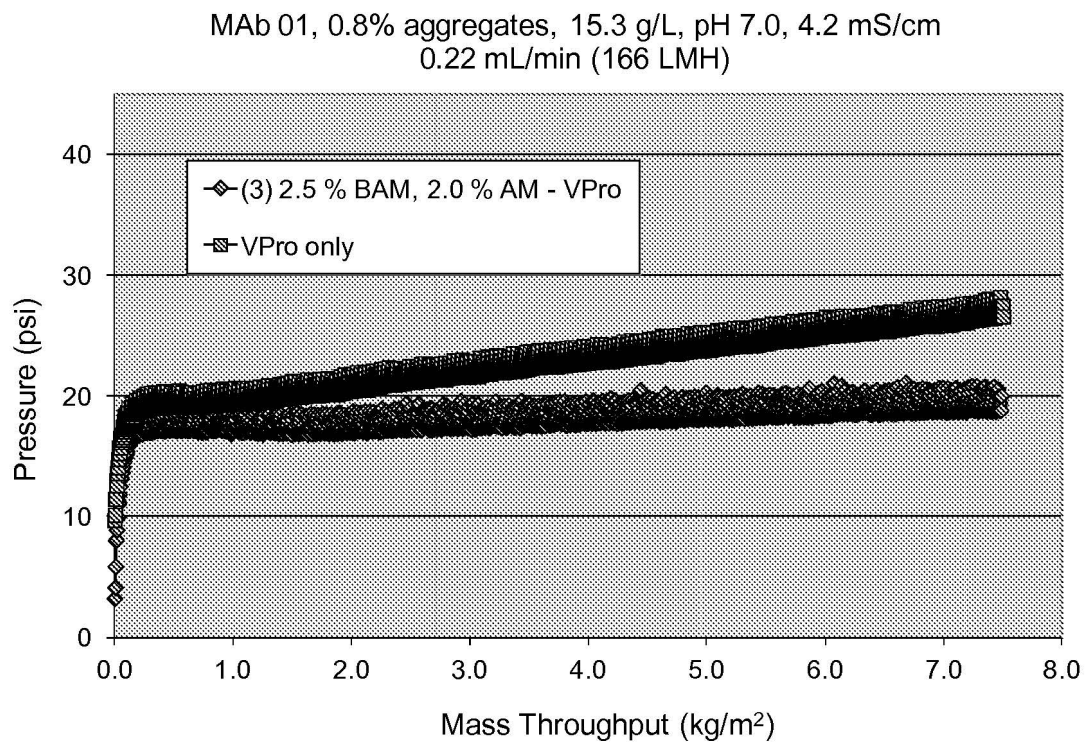


Figure 14. MAb 01 virus filtration performance with membrane (3) and without prefiltration

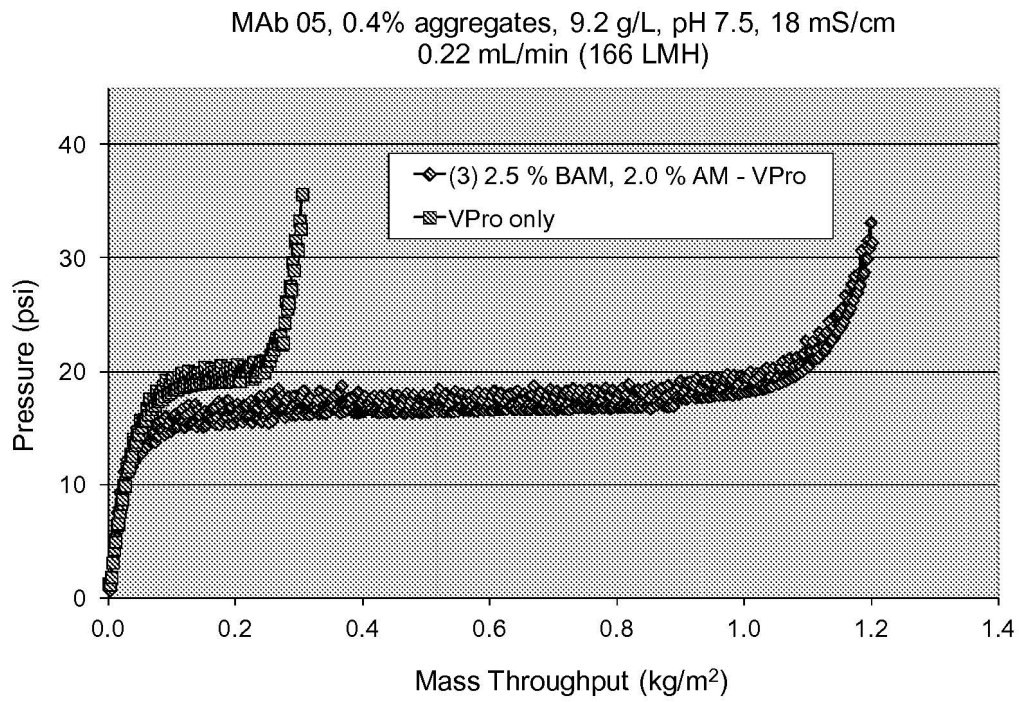


Figure 15. MAb 05 virus filtration performance with membrane (3) and without prefiltration

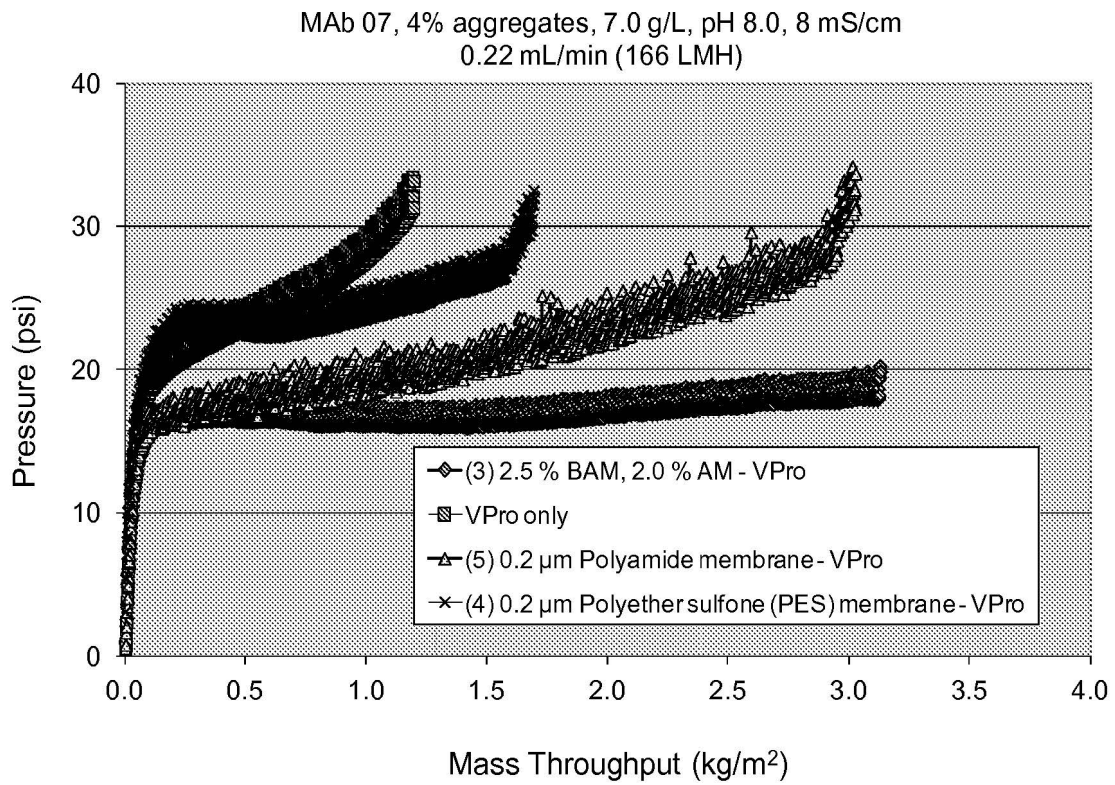


Figure 16. MAb 07 virus filtration performance with membranes (3), (4), (5), and without prefiltration