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(57) Abstract: High resolution protein A chromatography employing a chaotropic agent and pH gradient or pH step elution buffer results in improved peak resolution between closely related molecular species. Bispecific antibodies containing a protein A-binding-ablating substitution CH3 domain paired with a protein A-binding CH3 domain are separated with high peak resolution from monospecific antibodies containing a protein A-binding-ablating substituted CH3 domain paired with the protein A-binding-ablating substituted CH3 domain and monospecific antibodies containing a protein A-binding CH3 domain paired with the protein A-binding CH3 domain. Useful chaotropic agents include magnesium chloride and calcium chloride.

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