

SUPPLEMENTAL INFORMATION for *Impact of non-canonical cysteine on the stability of monoclonal antibody therapeutics: implications for candidate selection*

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Table S1. Representative prior work on SEC aggregation behavior of IgG1 and IgG2 antibodies

Antibody used	Formulation	Aggregation condition	% SEC-HMW increase from time zero*	Reference	Notes
Anti-IL-8 (IgG2)	100 mg/mL, 200 mM sucrose, 15 mM arginine, 15 mM histidine, pH 6	40 °C for 6 months	11%	Wang et al.	
Average of 4 IgG1 antibodies	20 mg/mL, 10 mM sodium phosphate, 5% (w/v) sorbitol, pH 7.0	45 °C for 4 weeks	~1%	Franey et al.	Only void volume aggregate level; dimer peak was excluded from reporting
Average of 7 IgG2 antibodies		45 °C for 4 weeks	~0.5%		
6 IgG1 monoclonal antibodies	1 mg/mL, 20 mM citrate, 150 mM sodium chloride, pH 6.0	40 °C for 4 weeks	~0.5-4.5% depending on the antibody	Brader et al.	
Anti-Ang2 Cys49Thr and Anti-Ang2 Cys49Asn IgG2	1 mg/mL, PBS	40 °C for 4 weeks	~3%	Buchanan et al.	These are for the mutant antibodies where the non-canonical cysteine was removed
IgG2	100 mg/mL in 10 mM acetate, 5% sorbitol at pH 5.0-5.5	37 °C for 1 month 37 °C for 3 months	~1% ~4%	Perico et al.	

*SEC-HMW values are presented as reported or estimated from the published figures in the cited publications. Unless stated, all peaks eluting prior to the main peak are included in the %HMW calculation.

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