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Supplemental Material to:

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Supplementary Materials

to

Removal of a C-terminal serine residue proximal to the interchain disulfide bond of a human IgG1 lambda light chain mediates enhanced antibody stability and antibody dependent cell cytotoxicity (ADCC)

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The authors declare that there is no conflict of interest.

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Supplemental materials

Material and methods

Thermal Stability Measured by Differential Scanning Calorimetry (DSC)

Thermal unfolding was determined at approximately 1 mg/ml in PBS using a Micro-Cal VP-Cap DSC instrument. All samples were scanned in a temperature range of 20-95ºC with a scan rate of 60 ºC/hour. The solutions were pressurized in the capillaries to approximately 60 psi during each scan. During data analysis, a buffer/buffer scan was subtracted from each buffer/protein scan and the thermogram was normalized for protein concentration. Baseline correction was then performed and melting temperature (T_m) defined as the midpoint of each thermal denaturation was obtained from peaks maximum.

Supplementary Figure 1. Thermal stability of λ and λdS IgGs by differential scanning calorimetry (DSC). The melting temperatures (T_ms) of λ antibody were determined to be CH2: 72.17 ± 0.10 °C, Fab: 76.97 ± 0.03 °C, and CH3: 83.82 ± 0.06 °C. The T_ms for λdS antibody were determined to be CH2: 71.76 ± 0.27 °C, Fab: 76.79 ± 0.06 °C, and CH3: 82.95 ± 0.11 °C.