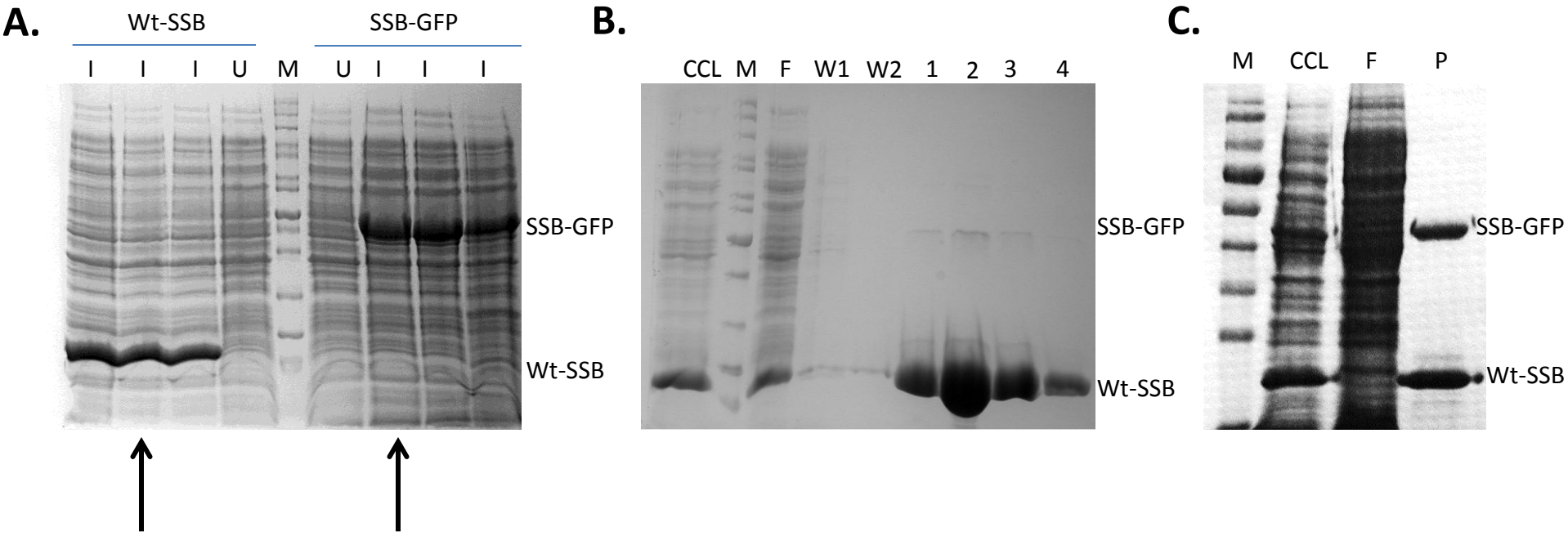
Supplementary Material

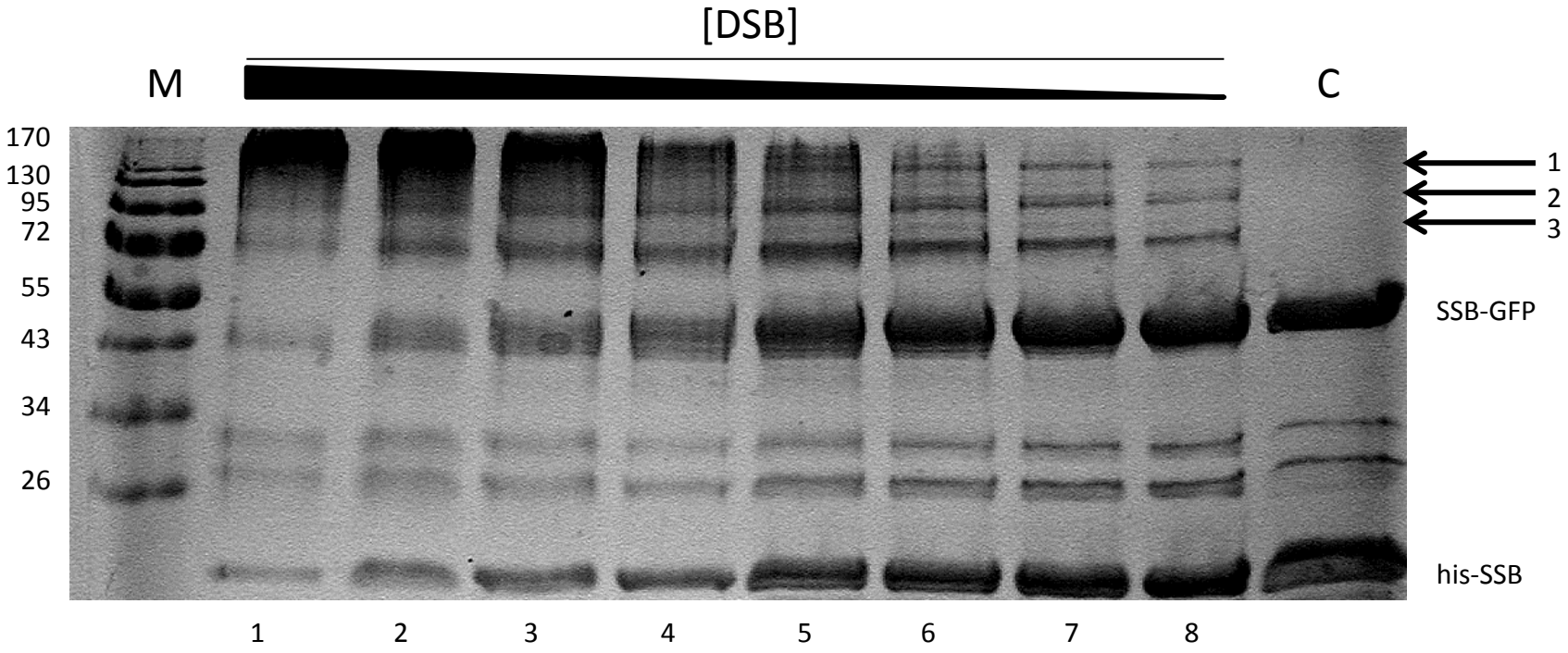
Figure legends

Figure 1. Chimeric SSB proteins are formed *in vivo.* (A). An SDS-PAGE gel showing total cell lysates from separate cultures of wild type, his-SSB and SSB-GFP. M, molecular weight marker; U, uninduced culture and I, culture induced with 100 µM IPTG for 4 hrs. Arrows indicate the cultures that were combined for the analysis in panel B. (B). SDS-PAGE gel showing stages of the purification of the combined his-SSB and SSB-GFP cell lysate. CCL, cleared cell lysate; M, marker, F, flow through, w, wash steps and lanes 1-4 indicate separate fractions eluted form the column. (C), A dried, SDS-PAGE gel showing stages of purification of an H/H his-SSB/SSB-GFP purification. M, marker, CCL, cleared cell lysate, F, column flow through and P, pooled fraction eluted with 500mM imidazole. In each panel, 12% SDS-PAGE gels are shown.

Figure 2. Chimeric SSB proteins form stable heterotetramers. A 15% SDS-PAGE gel showing crosslinking of 5 µM SSB-GFP (2/4 chimera). Cross-linking was performed using dimethylsuberimidate (DSB) for 3 hours at room temperature as described in Curth, U. *et al.,* Nucleic acids Research *24:*2706-2711 (1996). Molecular weight marker is indicated to the left of the gel; cross-linked species are indicated by arrows 1-3. Complex 1 corresponds to the 2/4 chimera with a MW = 138KDa; complex 2 consists of 2 wt and 1 SSB-GFP subunit and complex 3 consists of one wt and one fusion subunit. Cross-linking used DSB concentrations ranging from 40 µM to 5.22 mM, final. M, marker; C, control lane which did not contain DSB.



Supplementary Figure 1



Supplementary Figure 2