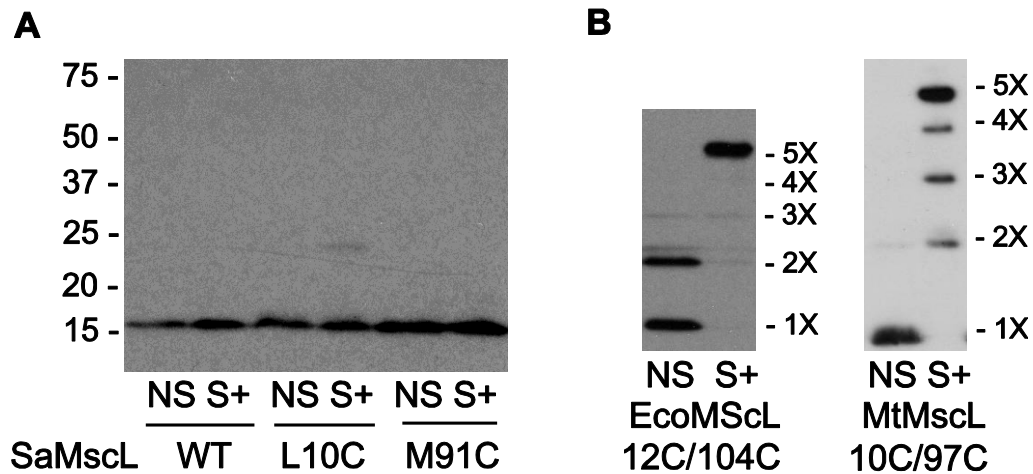


## Supplemental Information, Iscla et al



### ***In vivo* disulfide trapping experiments of SaMscL single mutants and the EcoMscL and MtMscL orthologs double cysteine mutants.**

The bacterial cultures were either non shocked (NS) or shocked (S+) in the presence of the oxidizing agent copper phenanthroline. Note that no detergent solubilization prior to resuspension in non-reducing Laemmli sample buffer is performed in these experiments.

*A*-Western blot analysis of WT SaMscL, single cysteine mutants L10C and M91C SaMscL full length. When shocked in the presence of copper phenanthroline WT and M91C SaMscL exists as monomers and a small percentage of L10C forms dimers.

*B*-EcoMscL 12C/104C exists as monomers and dimers when non-shocked. After down-shock in the presence of copper phenanthroline the pentamer becomes the major band. For MtMscL 10C/97C, a ladder of monomer through pentamer is observed in the shocked samples.