Fig. S1. Cys109 of nDsbD and Cys464 from cDsbD form a mixed disulfide in the reaction cycle of DsbD. A Coomassie-stained SDS-gel is shown that demonstrates the \textit{in vitro} synthesis of the nDsbD-cDsbD mixed disulfide crystallized in this study. The variant nDsbD-C103S was modified with Ellman’s reagent (DTNB), purified (lanes 3 and 6) and mixed at a 1:1 ratio with the purified, (His)$_6$-tagged variant cDsbD-C464S (lanes 2 and 5). The reaction product (lanes 1 and 4) corresponds to the DTT-sensitive band in lane 1, and was further purified by Ni-NTA affinity chromatography and gel filtration. The mass of the mixed disulfide was verified by MALDI-TOF mass spectrometry (measured: 31865.5 Da; calculated: 31851.5 Da. Lane S: molecular mass standard.