**Supplementary Information**

Different roles of \( N \)-terminal and C-terminal domains in calmodulin for activation of *Bacillus anthracis* edema factor.

**Figure S1.** Restoration of AC activity of EF by MsrA-treated oxidized CaM-wt. Reactions contained a final concentration of 10 \( \mu \)M native CaM-wt or oxidized CaM-wt, 0.67 \( \mu \)M MsrA and 2 mM DTT. Treatment of oxidized CaM-wt with 10 mM DTT and/or 4 \( \mu \)M MsrA for 1 h at 37 \(^\circ\)C was performed as described in the “Experimental Section”. The AC activities show the means ± SD of one experiment performed in triplicates.
Figure S2. Concentration-response curves for the stimulation of EF by native, oxidized and MsrA-treated oxidized CaM-wt and CaM-mut. Met oxidation using 50 mM H2O2 and 0.1 mM CaCl2 for 24 h at 25 °C, the treatment of oxidized CaM-wt or CaM-mut with MsrA and the AC activity assay were performed as described in the “Experimental Section”. Concentrations of native (black), oxidized (blue) and MsrA-treated oxidized (red) CaM-wt/CaM-mut varied from 1 nM to 10 µM. Concentration-response curves were analyzed by nonlinear regression (three parameters) using GraphPad Prism 5.04. The AC activity of EF with 30 mM Tris-HCl, pH 7.5 was set to 0% and with 10 µM native CaM-wt or each native CaM-mut to 100%. The AC activities show the means ± SD of three independent experiments performed in duplicates.