

Supplementary Information

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

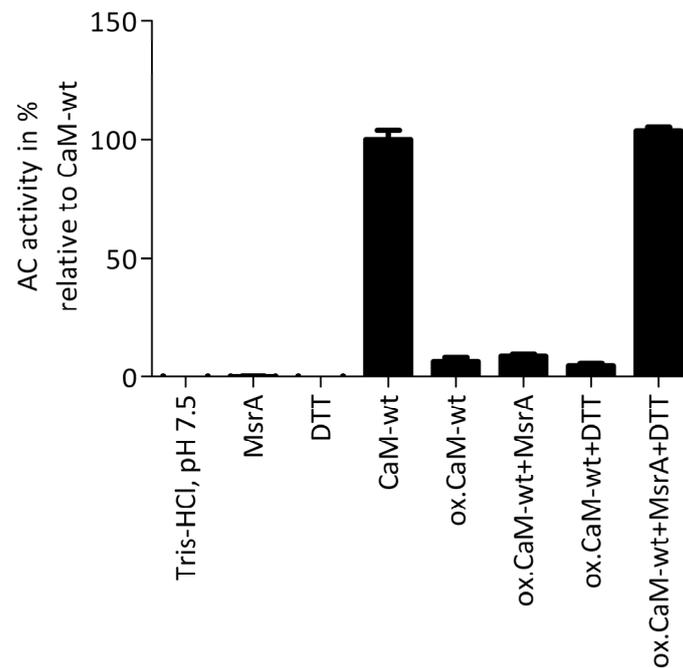


Figure S1. Restoration of AC activity of EF by MsrA-treated oxidized CaM-wt. Reactions contained a final concentration of 10 μ M native CaM-wt or oxidized CaM-wt, 0.67 μ M MsrA and 2 mM DTT. Treatment of oxidized CaM-wt with 10 mM DTT and/or 4 μ M MsrA for 1 h at 37 $^{\circ}$ C was performed as described in the “Experimental Section”. The AC activities show the means \pm SD of one experiment performed in triplicates.

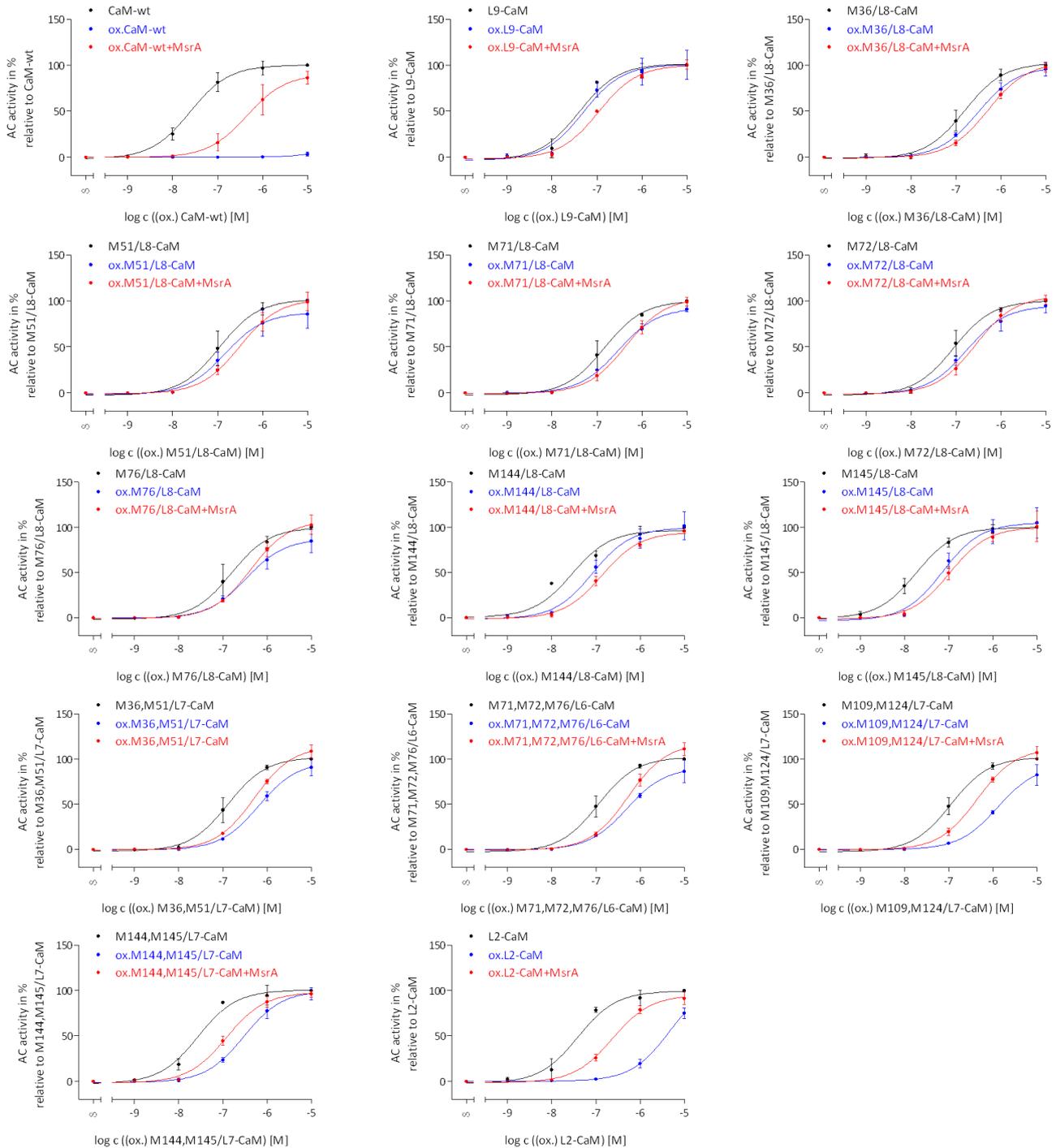


Figure S2. Concentration-response curves for the stimulation of EF by native, oxidized and MsrA-treated oxidized CaM-wt and CaM-mut. Met oxidation using 50 mM H_2O_2 and 0.1 mM CaCl_2 for 24 h at 25 °C, the treatment of oxidized CaM-wt or CaM-mut with MsrA and the AC activity assay were performed as 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 \pm SD of three independent experiments performed in duplicates.