

Supporting information for MAP kinases differentially bind and phosphorylate NOS3 via two unique NOS3 sites

Supplemental Figure 1:

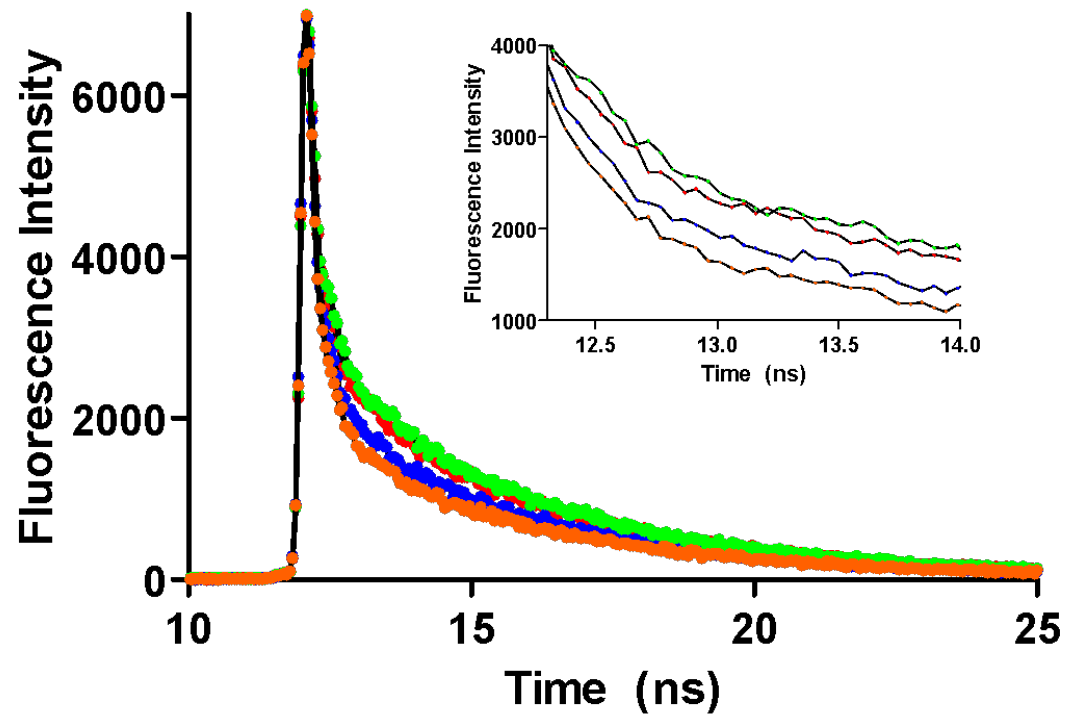


Figure S1. **Phosphorylation of NOS3 by JNK1 α 1 evinces no significant change in conformation.** Fluorescence decays of NOS3 holoenzyme FMN excited at 473 nm and detected at 525 nm. Blue is NOS3, green is CaM-bound NOS3, orange is JNK1 α 1-phosphorylated NOS3 and red is JNK1 α 1-phosphorylated, CaM-bound NOS3.

Supplemental Table 1: Global Association-then-dissociation model parameters and measures of goodness-of-fit

Fig. 2	Fig. 4						
	A	B	C	D	E	F	
<u>Best-fit values</u>							
k_{on} (M ⁻¹ s ⁻¹)	4106	6605	12135	17333	15864	14133	84646
k_{off} (s ⁻¹)	0.00006188	0.006226	0.002066	0.0005339	0.0009677	0.0005429	0.0002496
K_D (nM)	15	940	170	31	61	38	3
<u>95% Confidence Interval</u>							
k_{on}	4046 to 4165	5914 to 7315	11712 to 12566	16814 to 17864	15210 to 16534	13346 to 14949	83304 to 86002
k_{off}	5.745e-005 to 6.631e-005	0.006059 to 0.006398	0.002021 to 0.002112	0.0005230 to 0.0005449	0.0009290 to 0.001007	0.0005242 to 0.0005620	0.0002362 to 0.0002631
<u>Goodness of Fit</u>							
Degrees of Freedom	4498	4498	2246	4498	2248	3748	2248
R squared	0.9987	0.9758	0.9948	0.9883	0.9937	0.9567	0.995
Sum of Squares	4.69	1.488	2.871	5.203	7.294	1.296	11.76
$Sy.x$	0.03229	0.01819	0.03575	0.03401	0.05696	0.0186	0.07233

$Sy.x$ = standard deviation of the residuals (Y), in nm shift