

SUPPLEMENTARY INFORMATION

Figure 1S

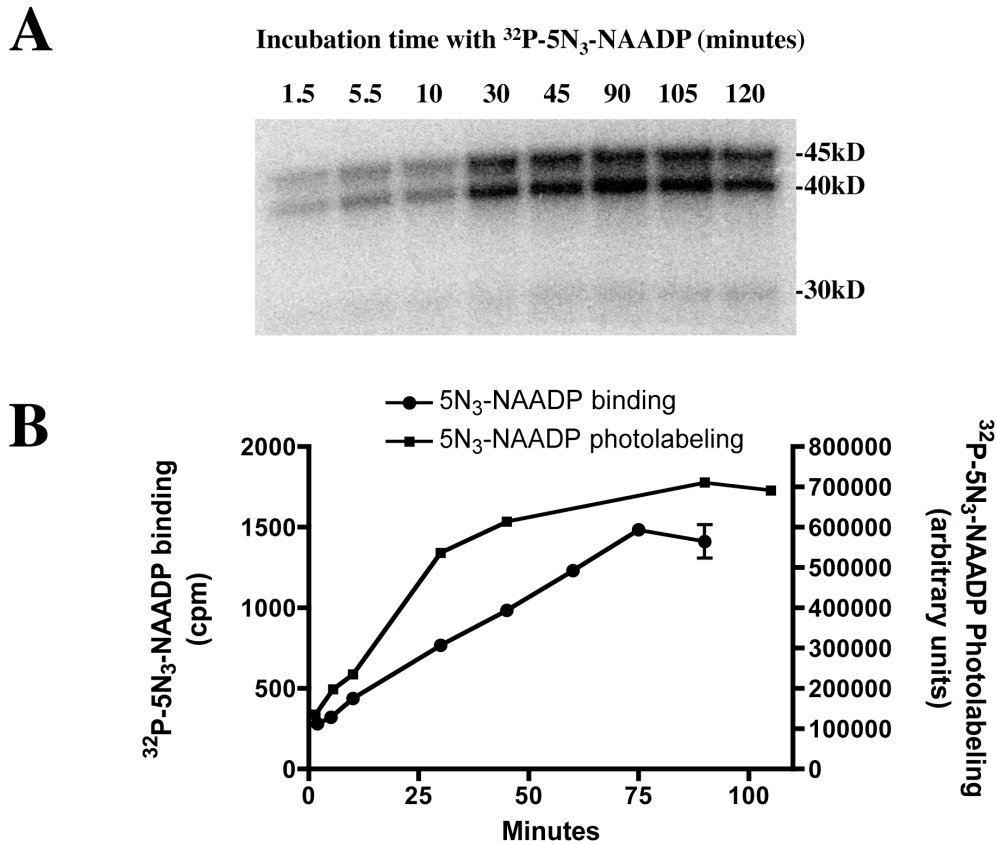


Figure 1S: Time course of  $^{32}\text{P}$ - $5\text{N}_3$ -NAADP photolabeling and binding. Sea urchin egg homogenates were incubated with  $^{32}\text{P}$ - $5\text{N}_3$ -NAADP for the indicated times at  $4^\circ\text{C}$  and then either exposed to UV photolysis for 2 minutes or subjected to a conventional binding assay using vacuum filtration. Panel A shows the results of  $^{32}\text{P}$ - $5\text{N}_3$ -NAADP photolabeling. Panel B shows the quantitative results of the photolabeling experiment shown in Panel B (squares --intensity of the 45, 40 and 30kDa bands combined) compared to the results obtained with a conventional binding assay (circles).

Figure 2S

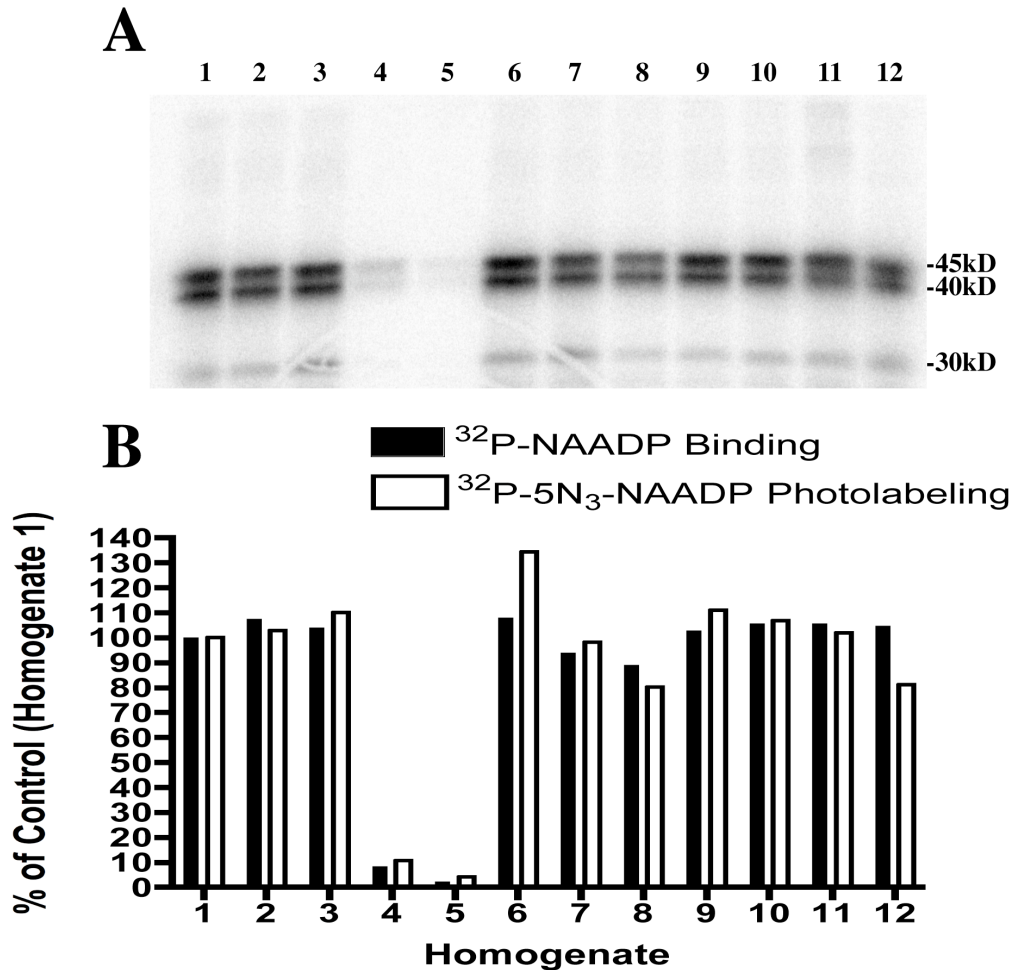


Figure 2S.  $^{32}\text{P}$ - $5\text{N}_3$ -NAADP photolabeling correlates with  $^{32}\text{P}$ -NAADP binding. Panel A shows  $^{32}\text{P}$ - $5\text{N}_3$ -NAADP photolabeling of twelve distinct *S. purpuratus* egg homogenate preparations. Panel B shows the comparison of the densitometric analyses of the photolabeling shown in Panel A (white bars) 45, 40 and 30kDa bands combined) with  $^{32}\text{P}$ -NAADP binding in these preparations (black bars). The data for photolabeling and binding is normalized to the results of homogenate #1, which was used for most of the studies described here. Note that photolabeling and binding correlate. Homogenates that have low  $^{32}\text{P}$ -NAADP binding activity do not photolabel efficiently (i.e. homogenates #4 and 5). This correlation between binding and photolabeling applies to the 32 preparations we have examined. This correlation also extends to the ability of NAADP to induce calcium release.