**Online Videos**

Supplemental video1.mov. **PKC-ε concentrates at phagocytic cups and on nascent phagosomes.**
BMDMs expressing PKC-ε-GFP were visualized with time during internalization of IgG-opsonized targets.

Supplemental video2.mov. **PIK93 reduces PKC-ε concentration at the cup and phagocytosis.**
BMDMs expressing PKC-ε-GFP were treated with DMSO (solvent control) or PIK-93 (10 µM, 10 min) and visualized with time during internalization of IgG-opsonized targets. PIK93 reduces concentration at the cup but the flash on NP was retained (Quantitation presented in Figs 4 and S3).