



SUPPLEMENTAL FIG. 1. Qdot does not obscure detection of DCF oxidation during catalase injection. EOMA cells were injected with DCF in the cytoplasm followed by intranuclear injection of catalase without the streptavidin-tagged Qdot. (a) The field contains two cells that both received DCF injection, but only one cell received the intranuclear catalase, as shown by the *arrow*. (b) The corresponding phase-contrast image is shown to demonstrate that DCF oxidation and inhibition by catalase occurred in the nucleus. (c) The same cells at 3 min of exposure show complete disappearance of DCF oxidation signal in response to nuclear catalase microinjection with (d) corresponding phase-contrast image confirming nuclear localization.