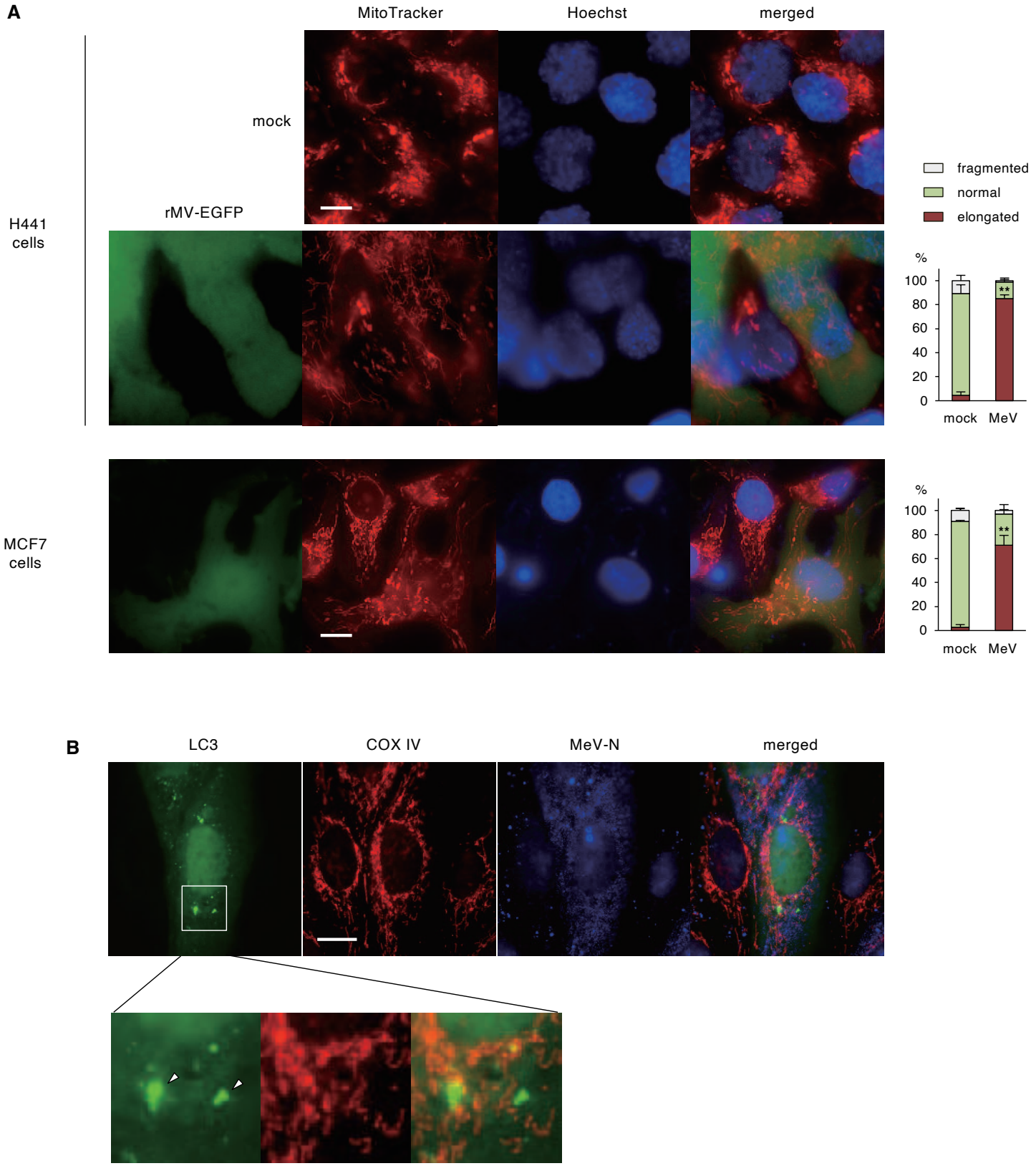Sato et al. S2 Fig