



**Supplementary Figure 5.** Rescue of phagosome maturation in *lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup>* fibroblasts by exogenous expression of LAMP-1 and LAMP-2. **A)** *lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup>* fibroblasts were transfected with cDNA encoding LAMP-1 or LAMP-2 and lysates were probed by immunoblotting for LAMP-1 or LAMP-2, alongside a comparable number of WT cells. Identical protein loading was verified by stripping and reprobing the blot for GAPDH (not shown). **B-C)** Embryonic fibroblasts from *lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup>* mice expressing GFP-Rab7, *myc*-tagged FcγIIA receptors and either LAMP-1 (**B**) or LAMP-2 (**C**) were exposed to IgG-opsonized beads and phagosome maturation was allowed to proceed for 60 min. The distribution of Rab7 is illustrated. Size bar represents 10 μm. **D)** Quantitation of the fraction of phagosomes positive for Rab7 in wildtype (black bars) and *lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup>* fibroblasts expressing exogenous LAMP-1 or LAMP-2 (open bars), as specified in the abscissa. Data are means ± SE of at least 4 separate experiments scoring at least 100 individual phagosomes from 20 or more LAMP-expressing cells.