Munc13 proteins control regulated exocytosis in mast cells

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Figure S1



Figure S1. Efficacy of Cre recombination in peritoneal MCs. Representative flow cytometry traces of peritoneal lavage cells obtained from crosses of Tg(Cma1-cre)ARoer mice with reporter B6.129X1- $Gt(ROSA)26Sor^{tm1(EYFP)Cos}/J$ mice labeled with Kit and FccRI α antibodies. In this reporter line, cells undergoing Cre recombination express yellow fluorescent protein (YFP). Only double positive cells in the scattergram in *A* are represented in the histogram in *B*. Only positive cells in the histogram in *C* are represented in the scattergram in *D*. Numbers in brackets represent the mean ± SEM from 7 animals. Almost all Kit/FccRI α double-positive cells in peritoneal lavages (*A*) were YFP-positive (*B*), indicating that most MCs underwent Cre recombination. Almost all YFP-positive cells in peritoneal lavages (*C*) were Kit/FccRI α double-positive (*D*), indicating that only MCs underwent Cre recombination.

Figure S2



Figure S2. Scoring of MC degranulation in histological samples. Representative images of lip sections 90 minutes after challenge in the model of passive systemic anaphylaxis stained with toluidine blue. Scoring was based on the localization of metachromatic granules. Degranulation was scored as low if < 10% of granules were visualized outside the cell, moderate if 10%-50%, and severe if > 50%. Scale bars, top row = 20 μ m, bottom row = 5 μ m.

Figure S3



Figure S3. Identification of multigranular compartments in MC EM profiles. Details of cell profiles of peritoneal MCs fixed after 5 minutes of incubation with PMA/ionomycin and then processed for EM. Multigranular compartments were identified as cytoplasmic structures delimited by a single membrane that contain multiple granule cores. Notice the absence of membrane or cytoplasm between the enveloped cores. These structures were never visualized in resting MCs (not shown). Scale bars = $2 \mu m$ for all panels.