Supplemental Figure 1



Supplemental Figure 1. Histology, BAL cytology, and Gr-1 immunohistochemistry in twoevent TRALI with i.t. LPS priming. (**A-B**) Lung sections from mice administered i.t. LPS (24h @ 0.1 mg/kg) (**A**), and i.t. LPS (0.1 mg/kg) + MHC I mAb (4.5 mg/kg) at 2h post-injection. (**B**). H&E, magnification x200. (**C-D**) BAL white blood cells (**C**) and neutrophils (**D**) in control mice and mice challenged with either i.t. or i.p. LPS (0.1 mg/kg, respectively). Note interrupted y-axis in (**D**). **p<0.05 vs. control and i.p. LPS. (**E-F**) Gr-1 mAb immunostaining in mice administered i.t. LPS (24h @ 0.1 mg/kg) (**E**) and i.t. LPS (0.1 mg/kg) + MHC I mAb (4.5 mg/kg) 2h post-injection (**F**). Magnification, x400.

Supplemental Figure 2



Supplemental Figure 2. Platelet and neutrophil depletion protect mice from acid-induced ALI. Platelet depletion fails to protect from hyperoxic ALI. (**A-B**) Extravascular lung water and EVPE at 4h in C57BL/6 WT mice \pm platelet depletion and *c-mpl^{-/-}* mice challenged with i.t. acid (3 µl/g, pH 1.5 or 1.0). **,[†]p<0.05 vs. WT (pH 1.0). (**C**) C57BL/6 WT mice administered Gr-1 mAb vs. isotype control mAb prior to i.t. acid (pH 1.0) and killed at 4h. **p<0.05 vs. control. (**D**) Survival curves from WT C57BL/6 mice and *c-mpl^{-/-}* continuously exposed to >95% oxygen in a sealed plexiglass chamber. **p<0.05 vs. *c-mpl^{-/-}*.

Supplemental Figure 3.



Supplemental Figure 3. Platelet immunostaining and lung myeloperoxidase content in twoevent TRALI. (**A-B**) Lung CD41 immunostaining in mice from Figure 10A administered isotype control (**A**) or P-selectin mAb (**B**) prior to two-event TRALI. (**C-D**) Lung CD41 immunostaining in WT (**C**) or $CD18^{-/-}$ mice (**D**) from Figure 10C. (**E**) Lung myeloperoxidase content in mice from Figure 11 with two-event TRALI and treated with vehicle alone (DMSO) vs. vehicle + ASA. (**F-G**) Lung CD41 immunostaining in mice from two-event TRALI treated with vehicle alone (DMSO) (**F**) vs. vehicle + ASA (**G**). Magnification, x200 for all images.