



### Supplemental Figure 1

(A) Phenotypic characterization of the B cell splenic subpopulations (Follicular B cells, FB; Marginal Zone B cells, MZB) that are captured or not under shear stress by lipid bilayers containing VCAM-1 at the indicated densities. (B) Frequency of rolling naïve B cells under low shear stress (0.1-0.05 dynes/cm<sup>2</sup>) on lipid bilayers containing VCAM-1 or ICAM-1 at the indicated densities. (C) Quantification of the capture and strength of binding of IgM-stimulated wild type B cells to lipid bilayers containing VCAM-1 or ICAM-1 at the indicated densities under shear stress. (D) Comparison of the capacity of tethering and the strength of binding of VCAM-1 bearing membranes (50molec/μm<sup>2</sup>) in the presence or absence of ICAM-1 (50molec/μm<sup>2</sup>) under shear stress.