Supplemental Materials



Supplemental Figure 1. 43-1 GFP induction by human B cell lines is FCRL6-specific. The indicated 43-1 transductants were cultured for 18 h alone (white columns) or with the SUDHL6 (grey columns) and 721.221 (black columns) B cell lines. GFP expression was measured by flow cytometry.



Supplemental Figure 2. Generation of a panel of FCRL6 ligand-reactive monoclonal antibodies. *A* SUDHL6 cells stained with the indicated monoclonal hybridoma supernatants (black line) or isotype-matched control mAbs (grey shade), were counterstained with a PE-labeled goat anti-mouse Ig secondary reagent and analyzed by flow cytometry. *B* FCRL6 ζ cells were co-cultured with SUDHL6 cells either alone ("no treatment") or in the presence of the indicated hybridoma supernatants and assayed for GFP expression. Control antibodies were used at a final concentration of $25\mu g/mL$ and were diluted in the same culture media used for growing hybridomas. Columns represent the mean \pm s.d.; n=3.



Supplemental Figure 3. An HLA-DR specific mAb blocks the FCRL6/HLA-DR interaction. FCRL6 ζ cells were co-cultured for 18 h with SUDHL6 B cells either alone ("no treatment") or in the presence of an HLA-DR β -specific mAb (clone DA2) and assayed for GFP expression.



Supplemental Figure 4. FCRL6 ligand-reactive mAbs recognize HLA-DR. *A* Control BW5147 cells singly transduced with the HLA-DR α chain (top row) or co-transduced with the HLA-DR α and HLA-DR β 1 chains (botom row) were stained with FCRL6 ligand-reactive monoclonal hybridoma supernatants (black line) or isotype-matched control mAbs (grey shade), counterstained with goat anti-mouse Ig PE, and analyzed by flow cytometry. *B* FCRL6 ζ cells were co-cultured with BW5147 HLA-DR α + β 1 transductants in the presence of the indicated hybridoma supernatants and assayed for GFP expression as in Figure 2B.



Supplemental Figure 5. FCRL6 binds HLA-DR molecules composed of distinct DR β subunits. FCRL6 ζ (black columns) or untransduced 43-1 control cells (grey columns) were cultured for 18 h either alone ("none") or in the presence of the indicated BW5147 transductants and analyzed for GFP expression.