

Supplementary Figure Legends

Supplementary FIG. S1. YY1 conditional knock-down results in reduced CSR to IgG1, IgG3, and IgA. Splenic B cells from YY1 flox/flox mice were treated with TAT-CRE protein and grown in either LPS plus IL4 (IgG1) LPS plus anti-IgD dextran (IgG3) or LPS, IL4, IL5, TGF β , plus anti-IgD dextran (IgA), then evaluated by FACS for CSR to the appropriate isotype. YY1 deletion resulted in loss of CSR to all three isotypes.

Supplementary FIG. S2. YY1 conditional knock-down reduces the number of CD138 positive cells. Cells cultured in 5 μ g/ml LPS and 20 ng/ml IL4 for 3 days were stained with anti-CD138-APC as well as anti-IgG1-PE. The panel at the right shows summary data from six independent experiments. Error bars show standard deviation of the mean and the double asterisks represents $p < 0.001$.

Supplementary FIG. S3. (A-C) Western blot data for AID nuclear localization with various YY1 mutants. HEK293T cells were transfected with 6 μ g of Flag-AID and 18 μ g of various YY1 mutants shown above each lane. The top panels show the level of nuclear AID and the bottom panels show inputs for GAL-YY1 mutants.

Supplementary FIG. S4. YY1 knock-down in CH12 B cells reduces the amount of nuclear AID. CH12 B cells were transfected with YY1 siRNA and nuclear and cytoplasmic fractions were prepared and were probed by western blot for AID, YY1, tubulin, and actin. The number of cell equivalents in each lane are shown at the top. In

the YY1 blot the upper band in the nuclear extract represents the YY1-specific band and the lower band present in the nucleus and cytoplasm represents a non-specific band.