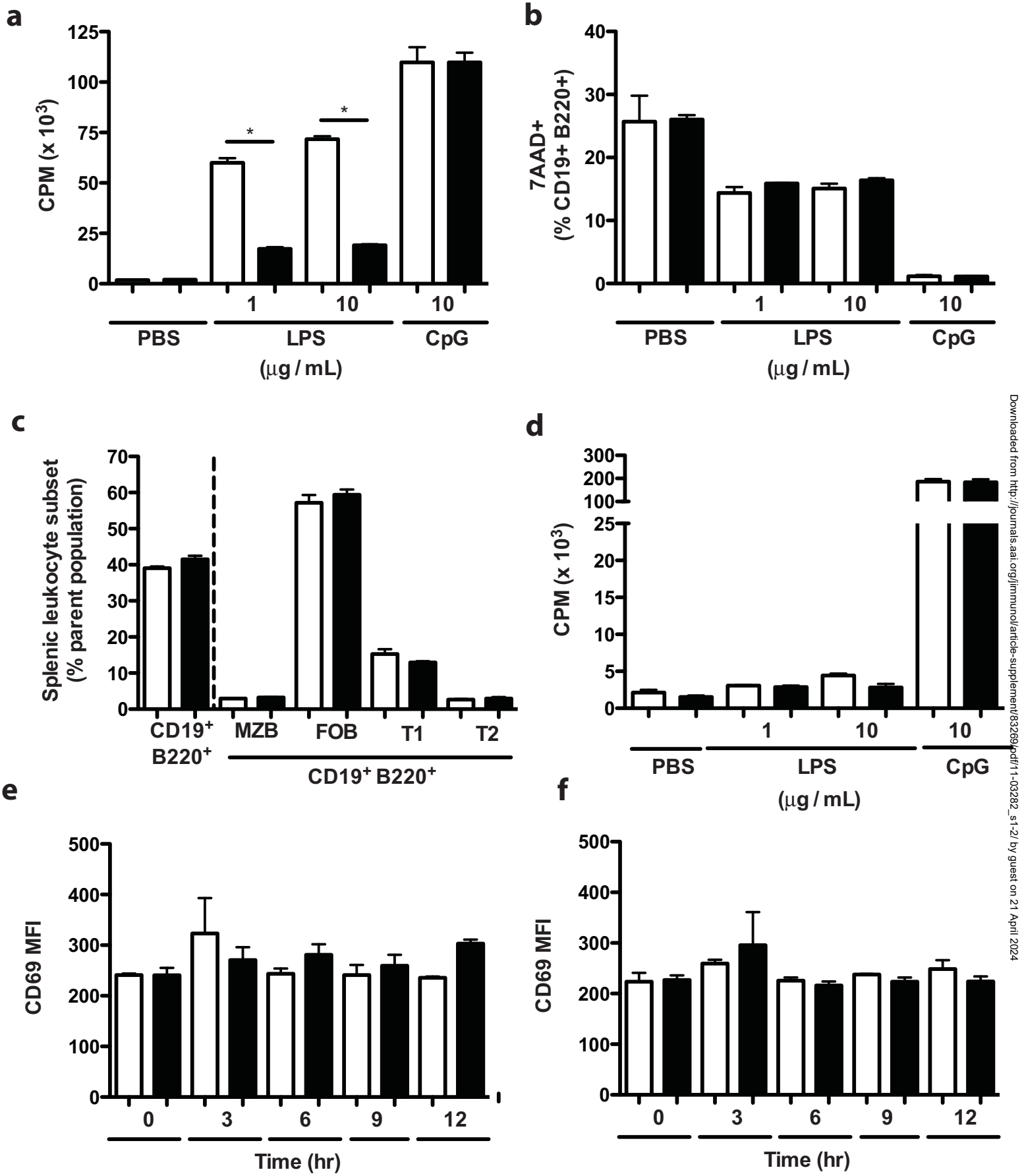
Supplementary Figure Legends

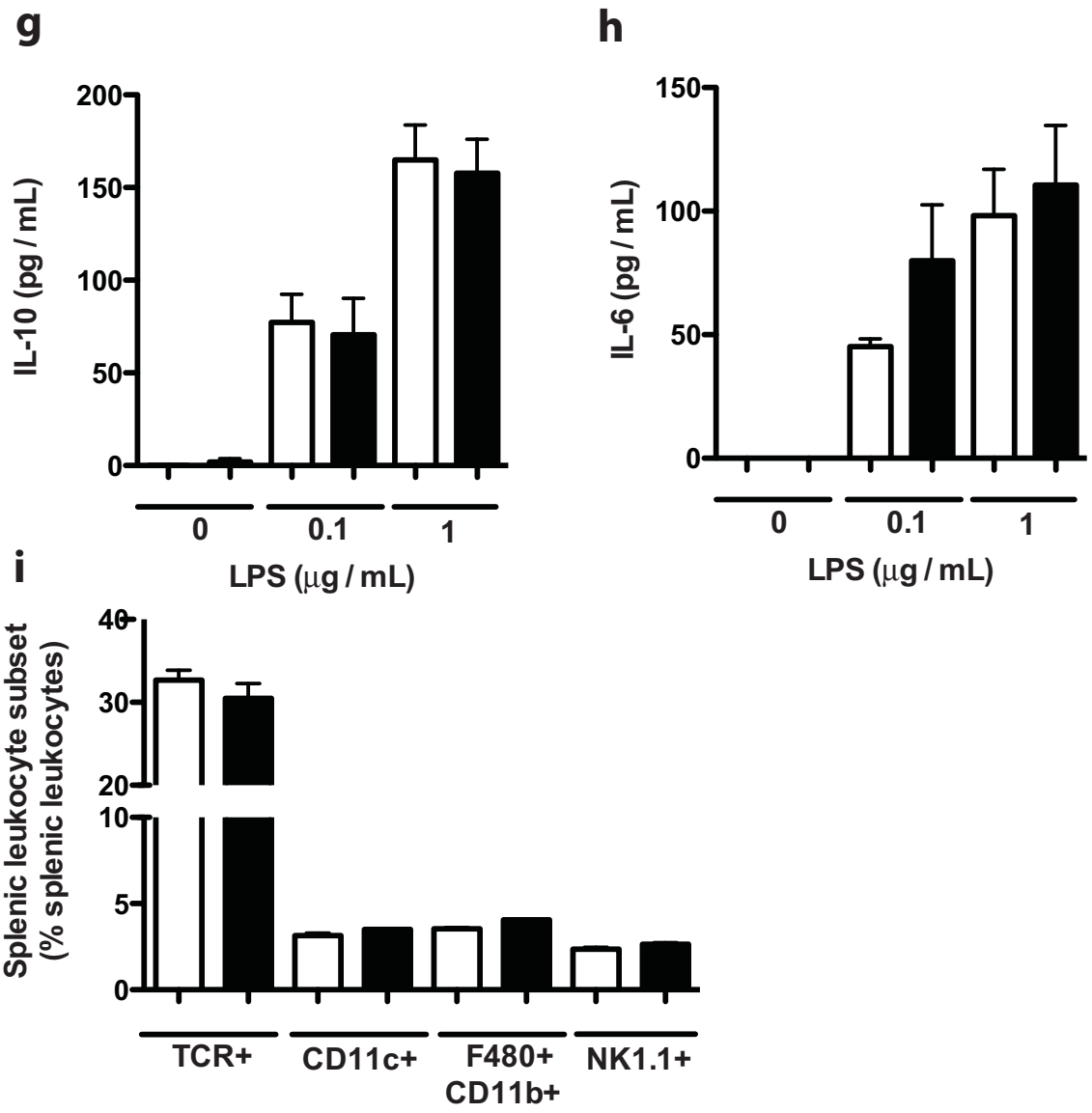
Supplementary Figure 1. The proliferative defect of B cells from RP105-deficient mice is not associated with increased B cell death or altered proportions of LPS-sensitive B cell populations. Splenic B cells, isolated by immunomagnetic separation from wild type (white bars) and RP105-deficient (black bars) mice, were stimulated as indicated. **(a)** Proliferation was quantified by thymidine incorporation. Means +/- SE are depicted; *N*=4 mice/genotype; representative of 2 independent experiments. **P*<0.0001, unpaired, two-tailed *t* test. **(b)** Cell death was quantified by flow cytometric analysis of 7AAD incorporation. Means +/- SE are depicted, *N* = 3 mice/genotype; representative of 2 independent experiments. (**c**) B cells (as a percentage of total splenic leukocytes) and splenic B cell subsets (as a percentage of total splenic B cells) were quantified by flow cytometry in wild type and RP105-deficient mice. Means +/- SE from a single experiment are depicted; *N*=2 mice/genotype; representative of 2 independent experiments. MZ B cells (MZB): $CD19^{+}B220^{+}CD21^{high}CD23^{-}$, FO B cells (FOB): $CD19^{+}B220^{+}CD21^{int}CD23^{+}$, type I transitional B cells (T1): $CD19^{+}B220^{+}CD21^{low}$ $CD24^{high}CD23^{-}$, type II transitional B cells (T2): $CD19^{+}B220^{+}CD21^{high}CD24^{high}CD23^{+}$). **(d)** FACS-sorted FO B cells were stimulated as indicated, and proliferation was quantified by thymidine incorporation. Means +/- SE of triplicate cultures are depicted; *N*=4 pooled mice/genotype; representative of 2 separate experiments. FACS-sorted **(e)** MZ and **(f)** FO B cells were stimulated with LPS (1 μg/ml) for the indicated time (0 – 12 hr), followed by quantification of CD69 expression. Wild type (white bars), RP105-deficient (black bars). Means +/- SE from a single experiment are depicted. *N*=5 pooled mice/genotype; duplicate wells/data point. Splenic B cells, isolated by immunomagnetic separation from wild type (white bars) and RP105-deficient (black bars) mice, were stimulated for 24 hr as indicated, and **(g)** IL-10 and **(h)** IL-6 were quantified by ELISA. Means +/- SE from 2 independent experiments are depicted; *N* = 6 mice/genotype. **(i)** TCR^{+}, $CD11c^{+}$, $F4/80^{+}$, $CD11b^{+}$, and $NK1.1^{+}$ splenic leukocyte subsets (as a percent of total splenic

leukocytes) were quantified by flow cytometry in wild type and RP105-deficient mice. Means +/- SE from a single experiment are depicted. *N*=3 mice/genotype. (Throughout, where unmarked: *P*>0.05, unpaired, two-tailed *t* test).

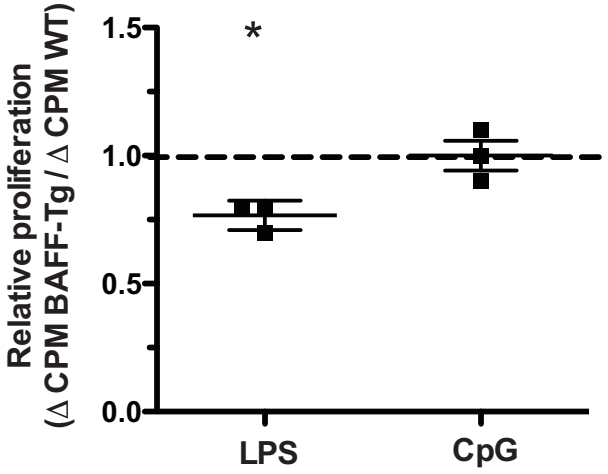
Supplementary Figure 2. MZ B cells from BAFF-Tg mice exhibit blunted TLR4-driven, but not TL9-driven, proliferation. MZ B cells purified from wild type and BAFF-Tg mice were stimulated with LPS (1 μg/ml) or CpG (10 μg/ml), and proliferation was quantified by thymidine incorporation. Proliferative ratios from 3 independent experiments, each involving triplicate wells of pooled MZ B cells, are depicted. **P*<0.02, one sample, two-tailed *t* test.



Supplementary Figure 1



Supplementary Figure 1



Supplementary Figure 2