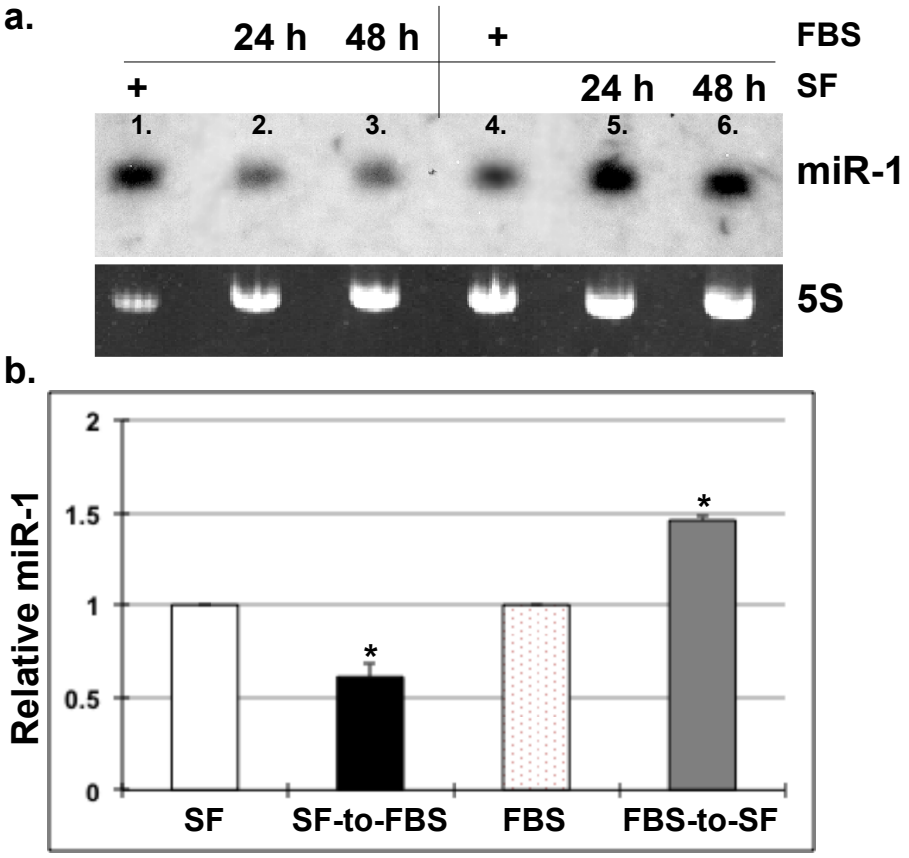

Figure 1S. MiR-1 is downregulated by fetal bovine serum or, conversely, upregulated upon deprivation of serum. a. Neonatal cardiac myocytes were maintained in either serum free (SF, lanes 1-3, upper panel) or in 10% fetal bovine serum (FBS, lanes 4-6, upper panel) for 24 h, before either adding FBS for 24 h (lane 2) or 48 h (lane 3), or depriving them of FBS for 24 h (lane 5) or 48 h (lane 6), as indicated. RNA was then extracted and analyzed by Northern blotting for miR-1. The lower panel shows 5S, as for loading control. **b.** The data points for the control and 48 h time point were quantitated and graphed as values relative to the control adjusted to 1.

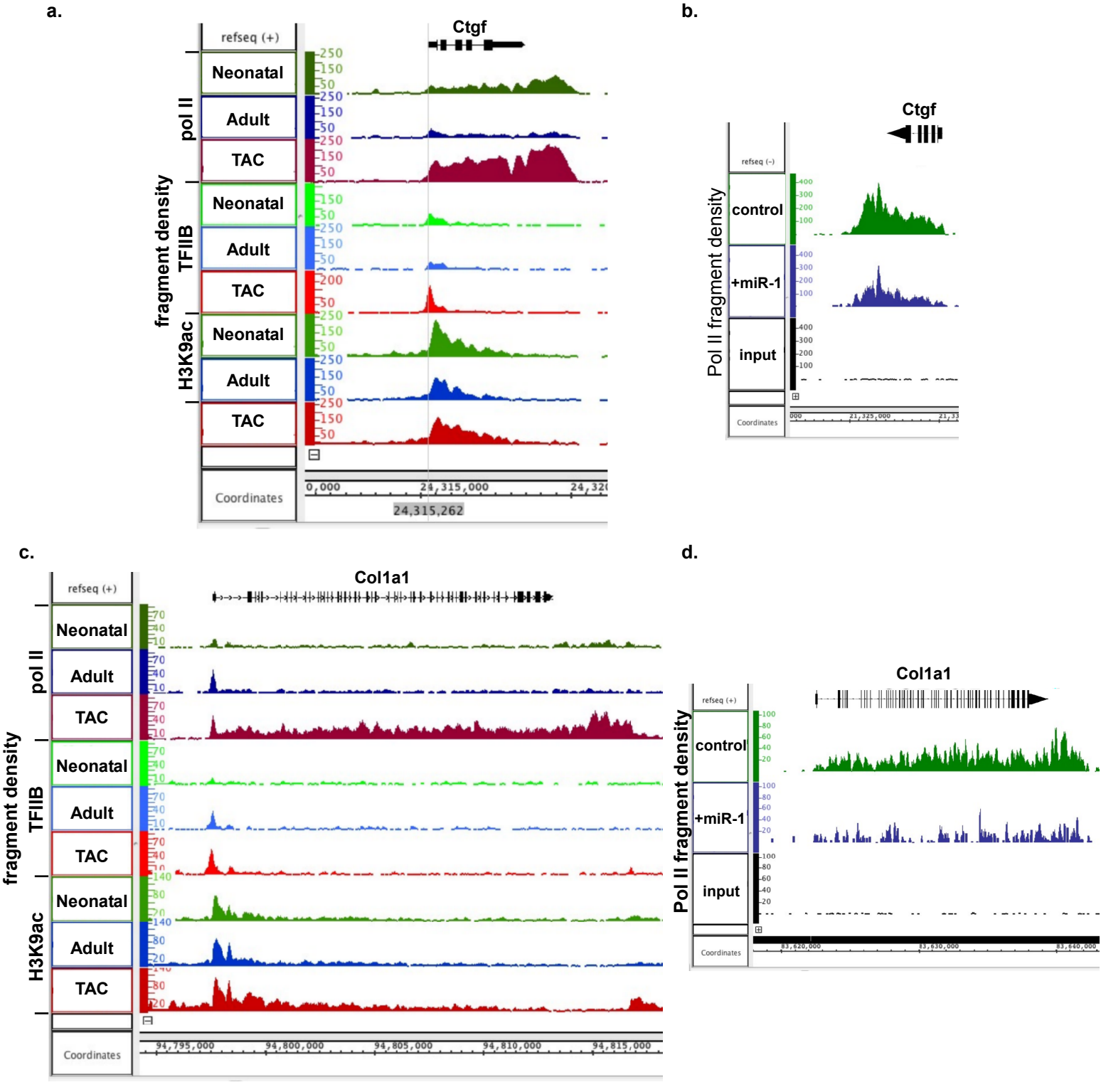

Figure 2S. ***Growth factors and extracellular matrix protein are regulated by de novo TFIIB and pol II recruitment during cardiac hypertrophy and are depressed by miR-1.*** a.-b. PolII, H3K9ac, and TFIIB ChIP-Seq data for neonatal, adult, and TAC-induced hearts are aligned and the data for Ctgf and Col1a1 are viewed with IGB. c.-d. Pol II ChIP-Seq data for miR-1-treated vs. control neonatal myocytes are aligned with the rat genome and the data for Ctgf and Col1a1 are viewed with IGB.

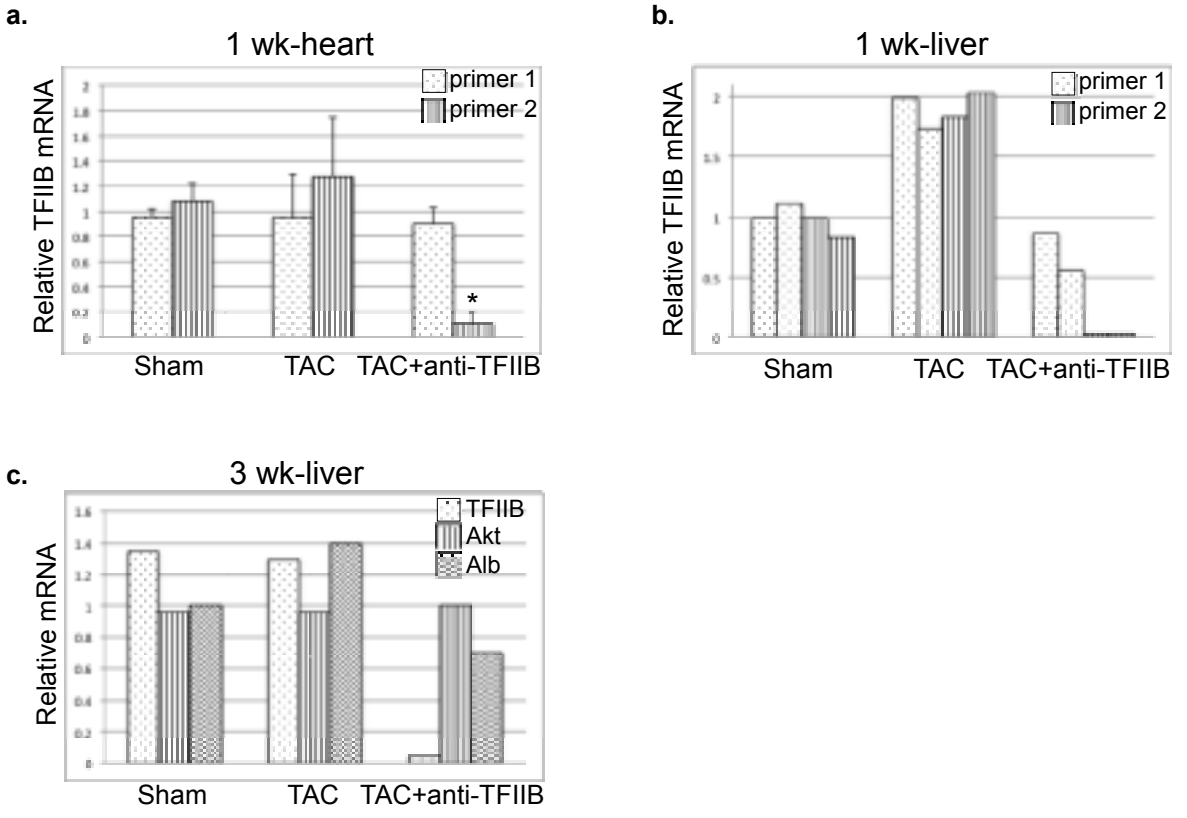

Figure 3S. ***LNA-modified anti-TFIIB suppresses endogenous TFIIB mRNA by occupancy in both the heart and liver.*** Twelve-week old, male, mice were subjected to a sham or transverse aortic constriction (TAC) operation. After 1d later the mice were randomly selected for injection with saline or 15 mg/Kg LNA-modified control or antisense TFIIB (anti-TFIIB) oligo, as indicated. a.-b. After 1 wk the mice were sacrificed and total RNA was extracted from both the heart and liver and analyzed by qPCR for TFIIB. Two different sets of primers were used. Primer 1, for detecting mRNA degradation, was distant from the site targeted by anti-TFIIB, while the Primer 2, for detecting mRNA occupancy by anti-TFIIB, encompassed the targeted site (see 'methods' for details). a. Result were averaged and plotted (n=4). b. qPCR results for each liver are plotted separately (n=2). c. Mice were sacrificed 3 wk post-TAC and treatment. Total RNA was extracted from the liver and analyzed by qPCR for TFIIB (primer 2), Akt, and albumin (Alb).

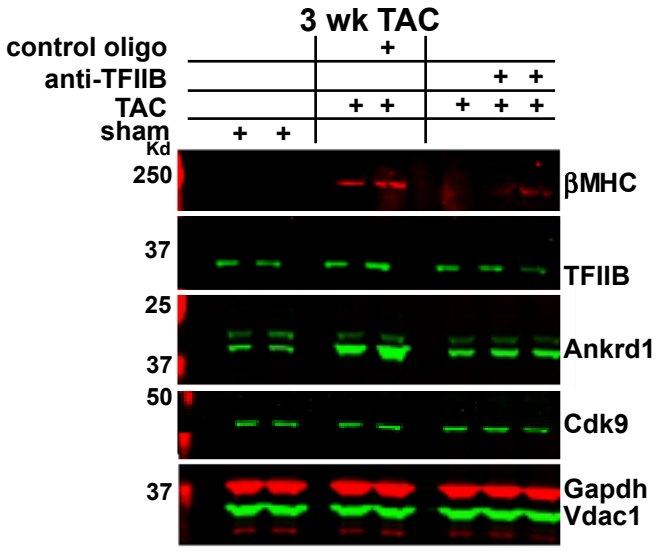

Figure 4S. ***Acute antisense inhibition of TFIIB reduces cardiac hypertrophy-induced gene expression and the increase in heart weight.*** Twelve-week old, male, mice were subjected to a sham or transverse aortic constriction (TAC) operation. After 1d the mice were randomly selected for injection with saline or 15 mg/Kg LNA-modified control or antisense TFIIB (anti-TFIIB) oligo, as indicated (n=3 each). After 3 weeks the hearts were isolated, protein was extracted and subjected to Western blotting for the specified genes. One experimental set is shown here; the second set is shown in Fig. 5 (set = same day surgery for all included mice).