# Supplementary Information

# Proximal GATA-binding sites are essential for human *HSD3B1* gene transcription in the placenta

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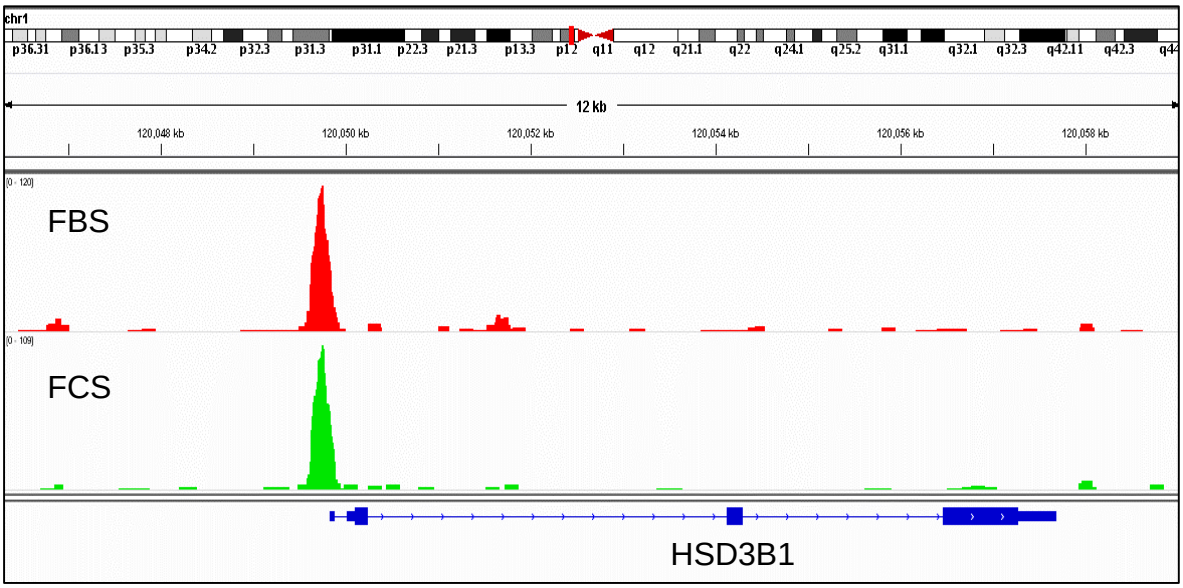
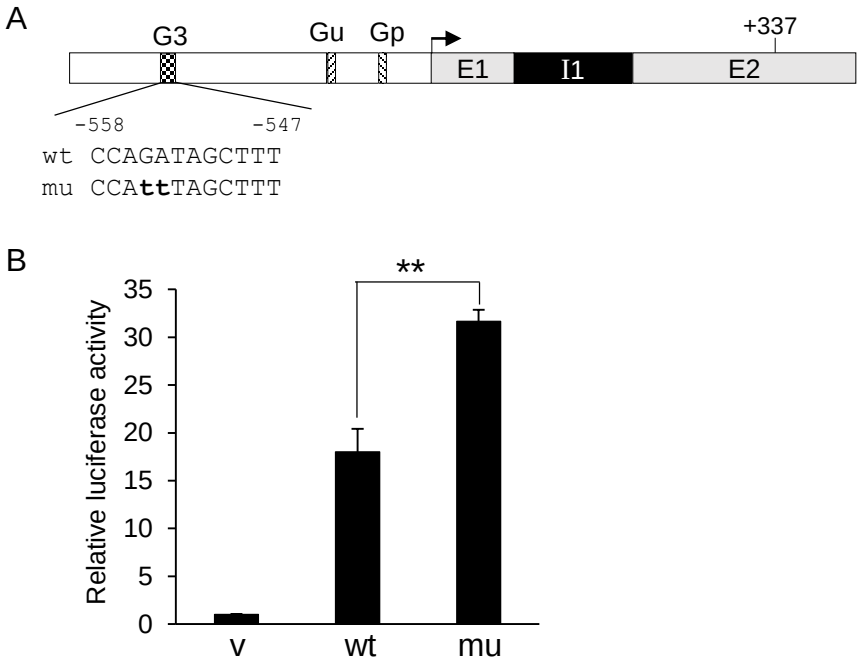
GATA2 ChIP-seq: LNCaP cells



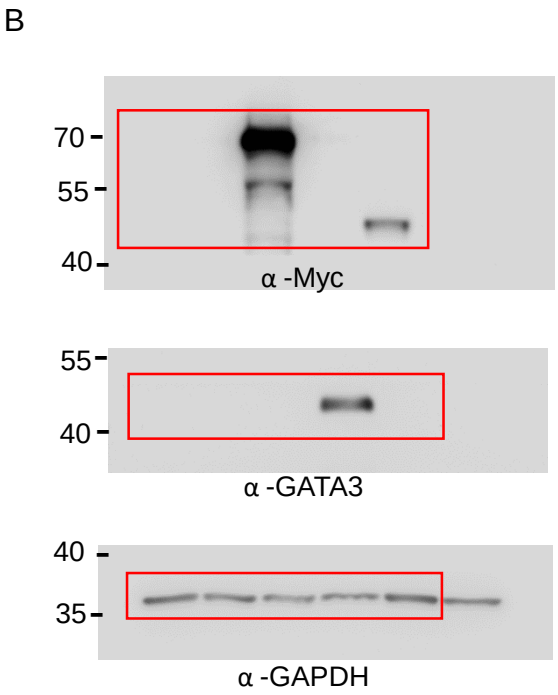

**Supplementary Figure S1.** Integrative Genomics Viewer shows GATA2 ChIP-seq results using the data set from GEO.

The GATA2 ChIP-seq data of LNCaP cells was published by Zhao et al. (16) and obtained from NCBI GEO database under accession number GSE69043. The GATA2 ChIP-peak was observed around the region -267/+104 of *HSD3B1* gene in LNCaP cells. FBS, foetal bovine serum (in the presence of androgen); FCS, foetal calf serum (in the absence of androgen).

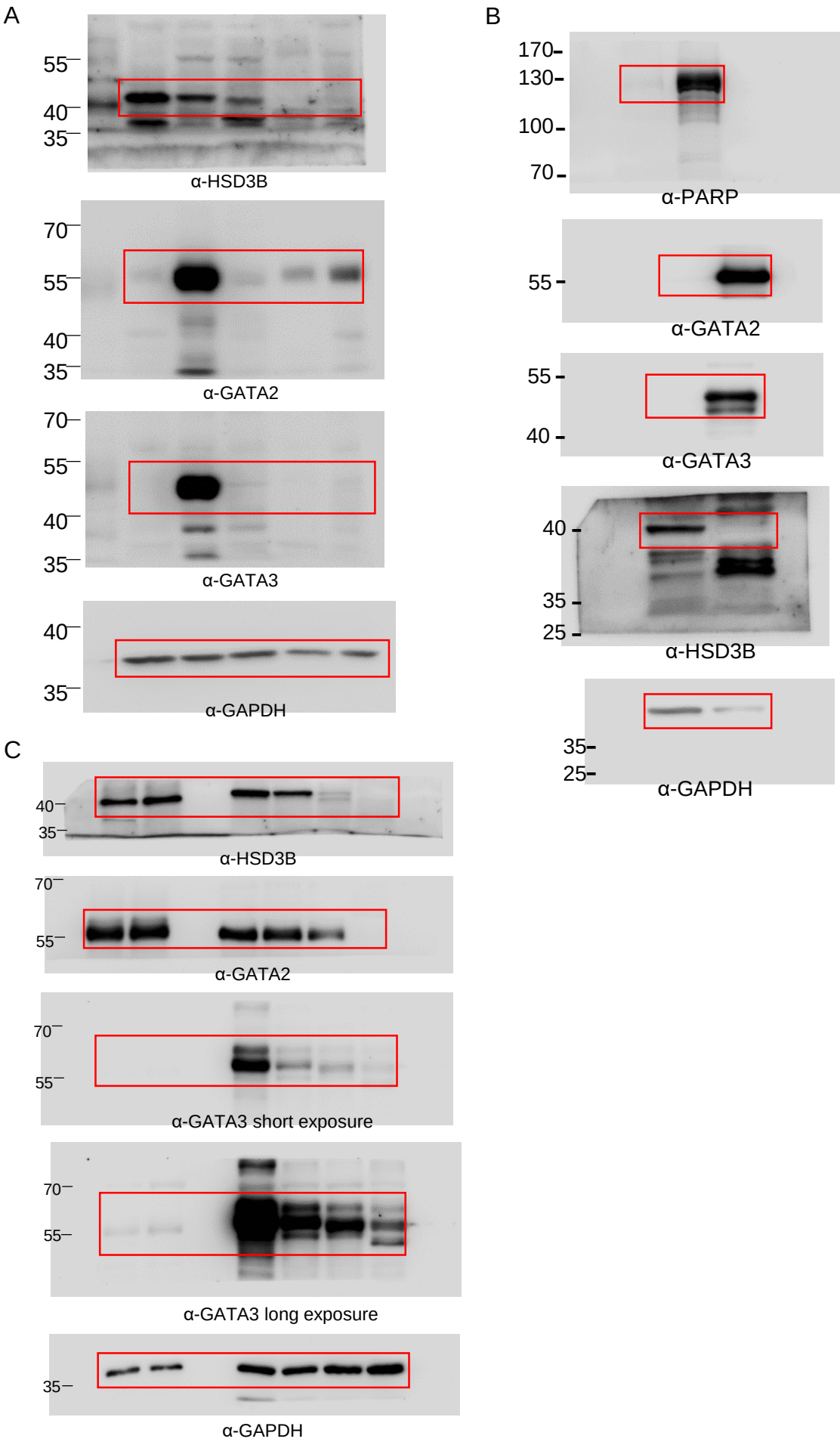



**Supplementary Figure S2.** Analysis of GATA-like binding site between -558 and -547 in *HSD3B1* promoter.

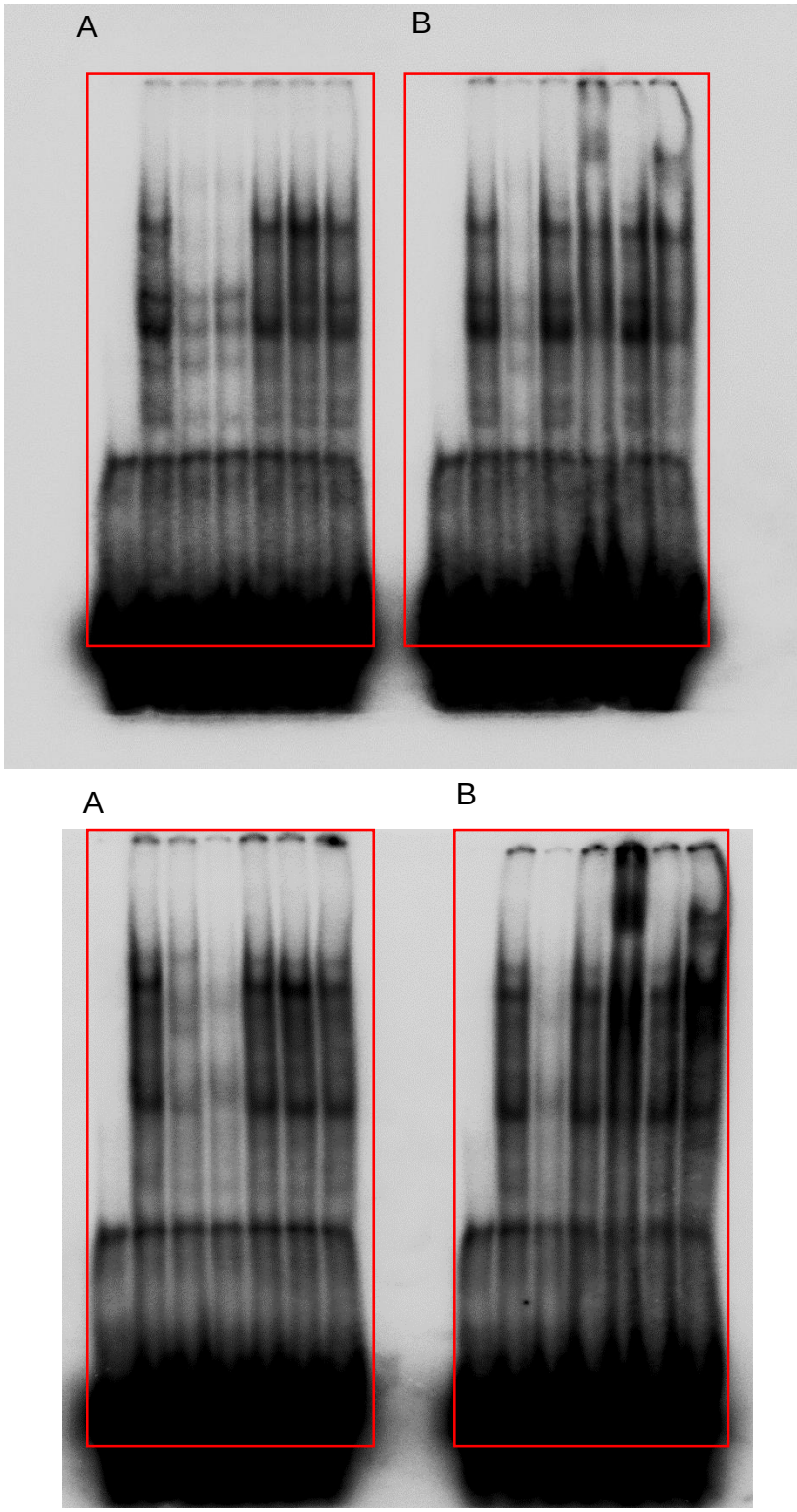
(A) Schematic of the promoter region in the HSD3B1 gene. "+1" is the transcription start site indicated by the arrow. Two putative GATA binding sites, Gu and Gp, are shown in Fig. 2. The sequences of a GATA-like binding site at -558/-547 (G3) are shown with mutated nucleotides in lowercase letters. (B) JEG-3 cells were transiently transfected with the -1069/+337 HSD3B1 promoter-luciferase construct containing wild-type or mutated GATA site in the G3. Results are presented as the activity relative to empty vector. Data are means ± SD of three independent experiments. ). $^{**}P < 0.01$ .



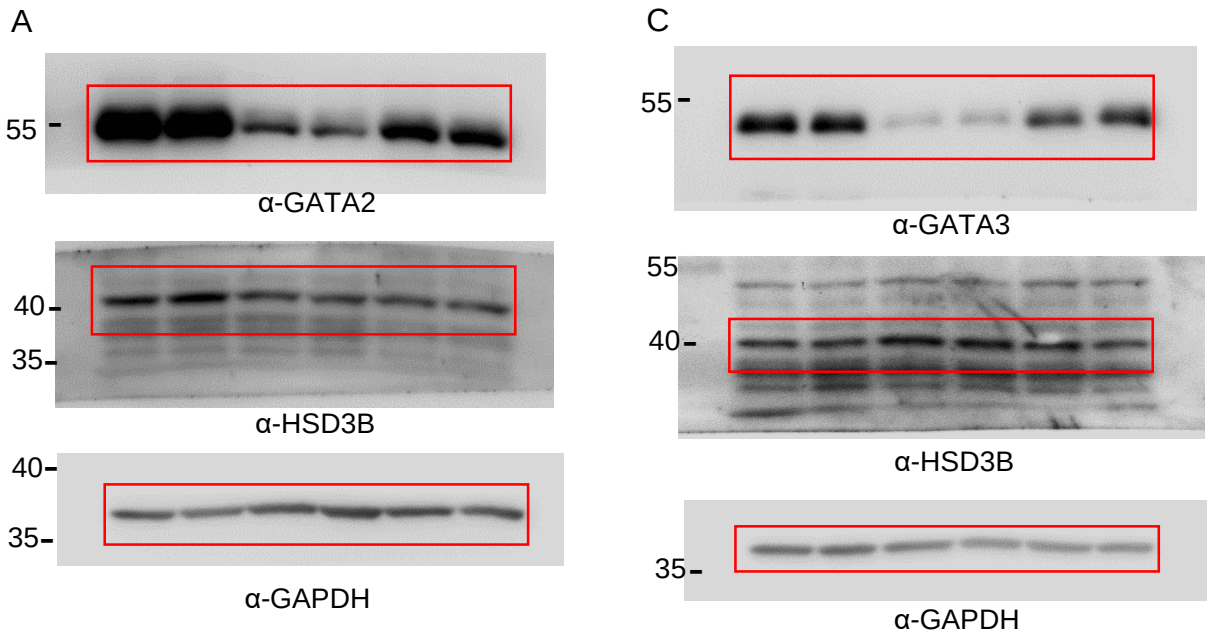

**Supplementary Figure S3.** Uncropped images of blots presented in the main Figure 3.




**Supplementary Figure S4.** Uncropped images of blots presented in the main Figure 4.




**Supplementary Figure S5.** Uncropped images of gels presented in the main Figure 5.




**Supplementary Figure S6.** Uncropped images of blots presented in the main Figure 6.