

# Appendix

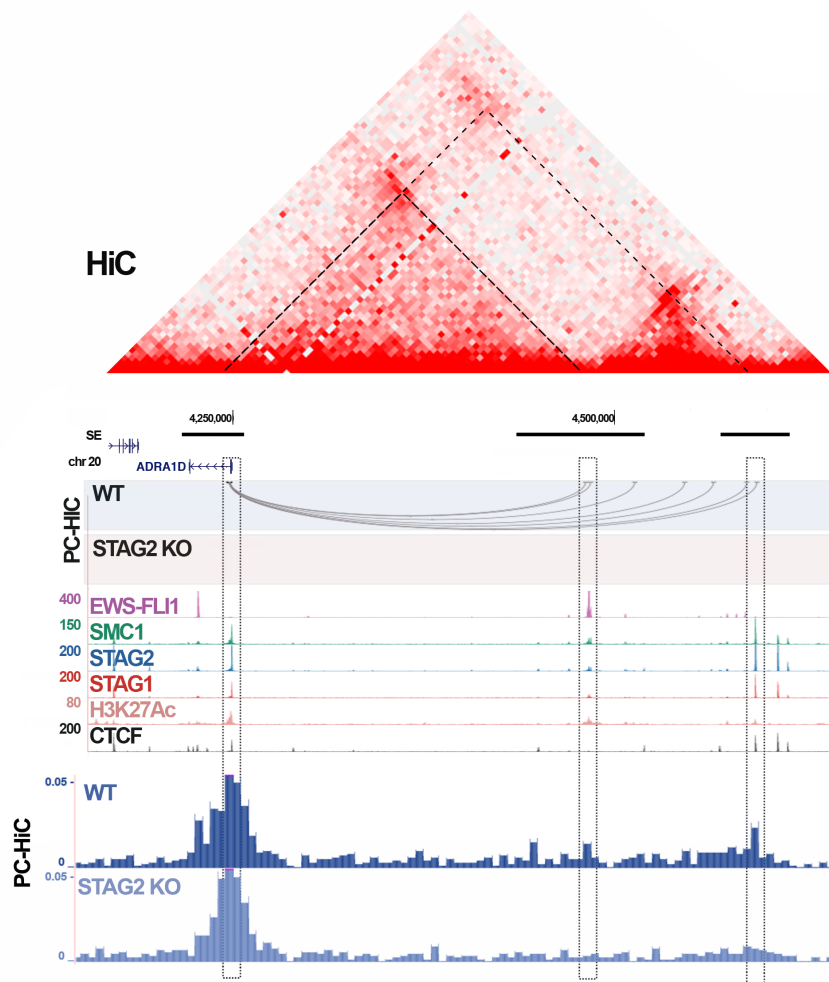
## **STAG2 loss in Ewing sarcoma alters enhancer-promoter contacts**

### **dependent and independent of EWS::FLI1**

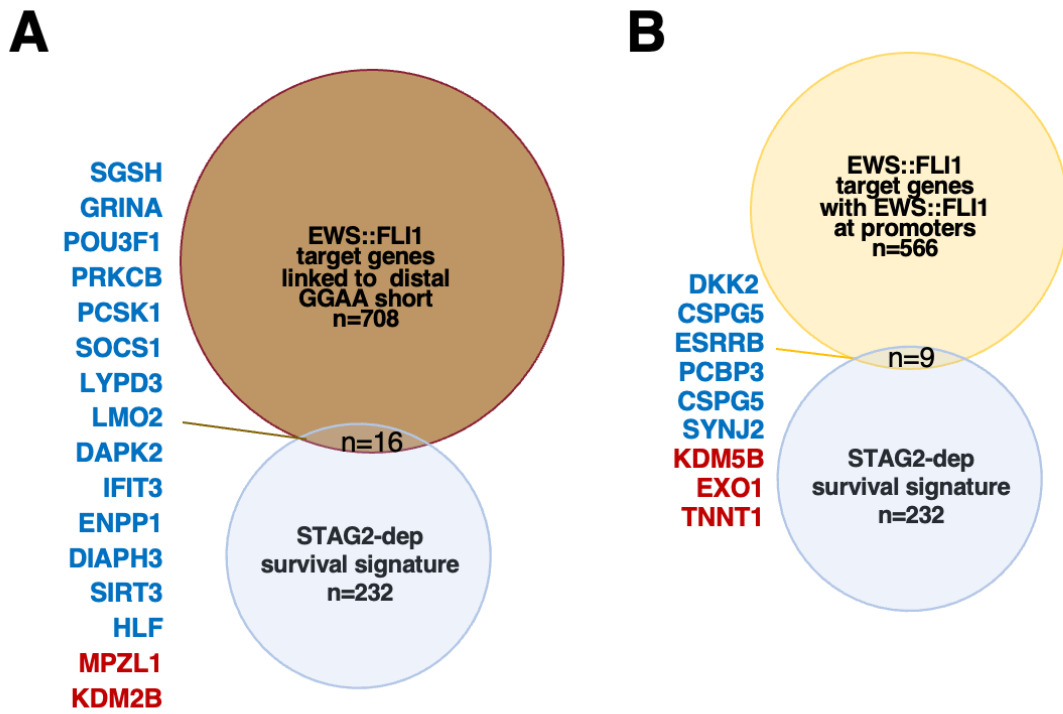
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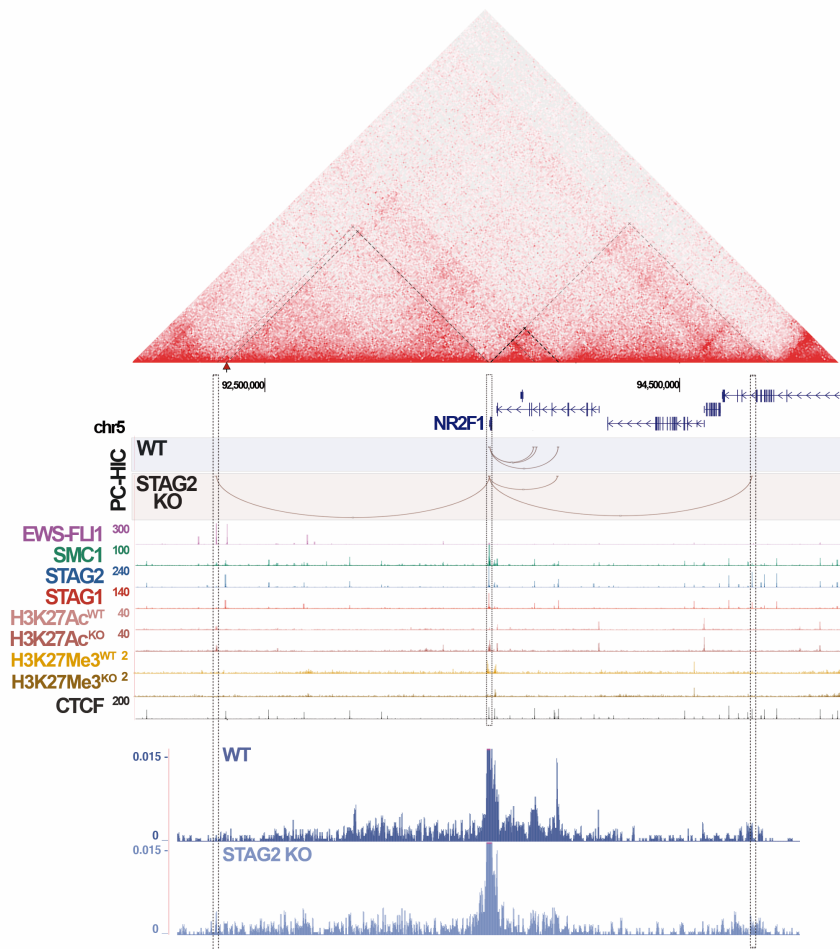


**Appendix Figure S1. Differential contacts from the *ADRA1D* gene promoter**  
 Genomic landscape of the region encompassing the *ADRA1D* gene, as in Figure 4G, to which we have added “virtual 4C” tracks displaying the interaction frequency of the gene promoter with neighboring regions in STAG2 WT and KO conditions.

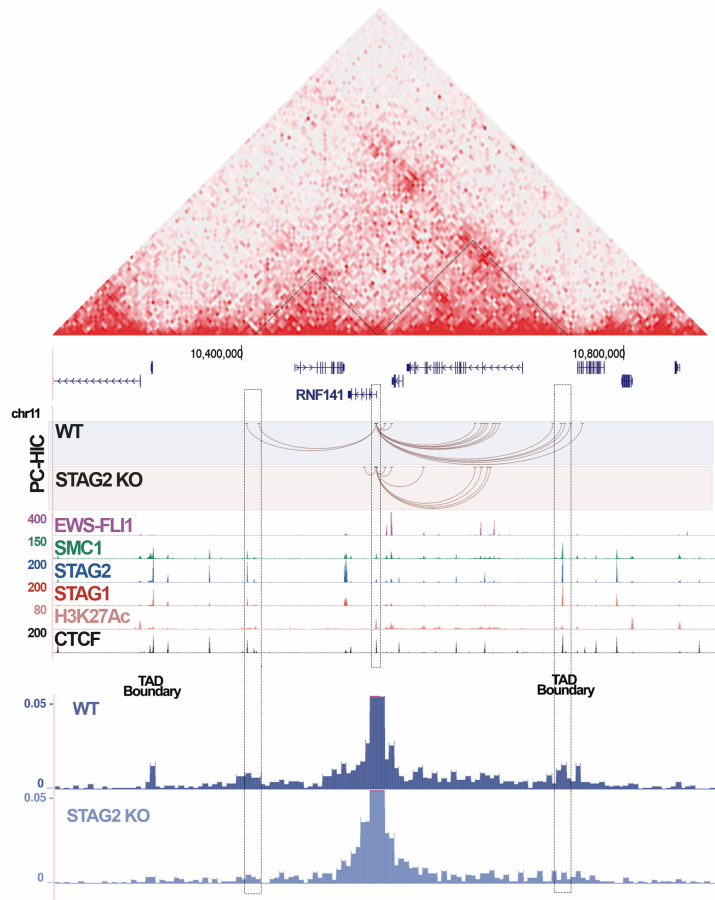


**Appendix Figure S2. Effect of STAG2 loss on EWS::FLI1 target genes**

Venn diagrams displaying the overlap between genes deregulated in Ewing sarcoma cells and patients without STAG2 and EWS::FLI1 target genes whose promoters are either linked to EWS::FLI1-bound GGAA(1-4) repeat regions (A) or directly bound by the oncoprotein (B). Downregulated and upregulated genes appear in blue and red, respectively.



**Appendix Figure S3. Differential contacts from the *NR2F1* gene promoter**  
 Genomic landscape of the region encompassing the *NR2F1* gene, as in Figure 5A, to which we have added “virtual 4C” tracks displaying the interaction frequency of the gene promoter with neighboring regions in *STAG2* WT and KO conditions.



**Appendix Figure S4. Differential contacts from the *RNF141* gene promoter**  
 Genomic landscape of the region encompassing the *RNF141* gene, as in Figure 6D, to which we have added “virtual 4C” tracks displaying the interaction frequency of the gene promoter with neighboring regions in *STAG2* WT and KO conditions.