Supplementary figure and tables

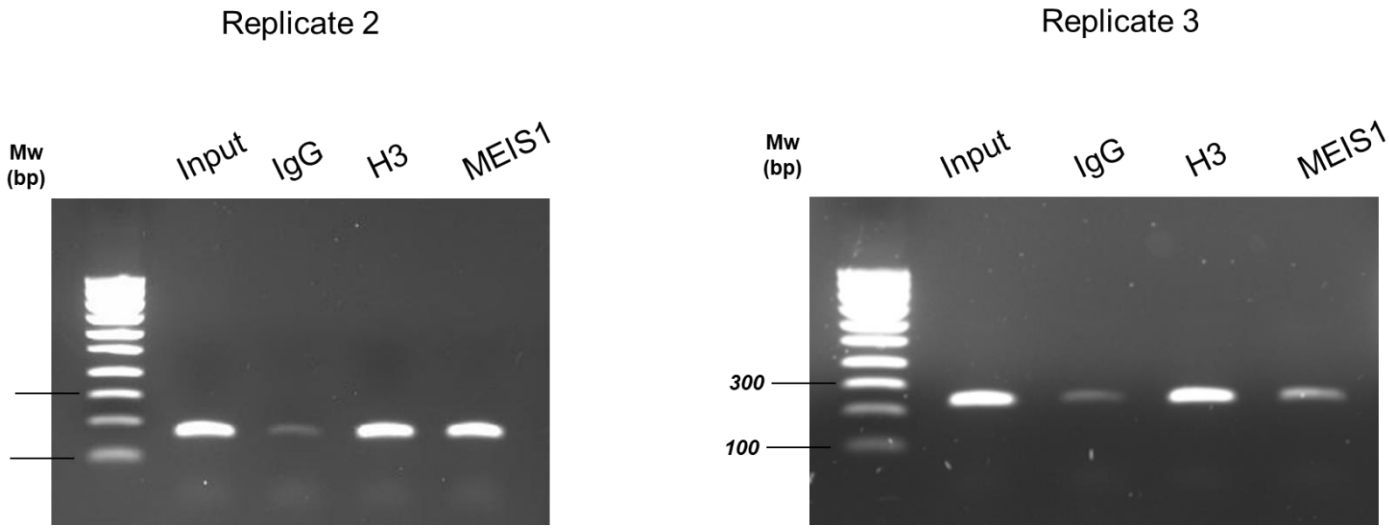

Figure S1. MEIS1 transcription factor contributes to *GJB2* expression, related to Figure 2.C

Binding of MEIS1 on C3 enhancer by ChIP-PCR. Two other replicates and in total three independent chromatin immunoprecipitations.

sgRNA#	target region	Sequence	PAM	Strand
1	P*GJB2*	GAGACTGGGAAAGTTACGGAG	GGG	+
2	C3	GCCTGTCAAGAGTCTTCCAAG	AGG	+
3	C3	GCTGCCCCACAATTACTCAC	AGG	+
4	C3	GTTGCTTCCCCCACATGCAAC	AGG	+
5	C3	AGCTTGTAAGTGCCGGCAAC	AGG	-

Table S1. CRISPRi and CRISPRa information, related to Figure 1.

Lists of sgRNA used for the both techniques.

G' was added because it is slightly more efficient

			genomic position chr13 (hg19)			distance from the *GJB2* transcriptional start site (kb)		length of interacting region (kb)
	TSS GJB2		chr13	20 771 695				
	PGJB2		chr13	20 766 541	20 768 081			
4C significant peaks	*Viewpoint PGJB2*	-220	chr13	20 980 139	21 005 586	-208,4	-233,9	25,4
		-290	chr13	21 043 822	21 076 849	-272,1	-305,2	33
		-625	chr13	21 384 908	21 408 432	-613,2	-636,7	23,5
	Viewpoint C3	P	chr13	20 765 648	20 776 998	6	-5,3	11,3
		-20	chr13	20 786 728	20 796 959	-15	-25	10,2
		-625	chr13	21 387 057	21 400 524	-615,4	-628,8	13,5
		Name of peaks						

Table S2. 4C peak coordinates, related to Figure 3 and 5.

PeakC calling determines genomic coordinates for each significant interactions.

Viewpoint	Direction	Orientation	Adaptater	Specific primer	Orientation	Primer sequence
PG*JB2*	Reading	5'	TACACGACGCTCTTCCGATCT	CTCCGCGACTCGAACAGATC	3'	TACACGACGCTCTTCCGATCTCTCCGCGACTCGAACAGATC
PG*JB2*	Non-reading	5'	ACTGGAGTTCAGACGTGTGCTCTTCCGATCT	GAGACAAGCCTCGTTTTTGCC	3'	ACTGGAGTTCAGACGTGTGCTCTTCCGATCTGAGACAAGCCTCGTTTTTGCC
C3	Reading	5'	TACACGACGCTCTTCCGATCT	GGAACCACTGGGTCAGAT	3'	TACACGACGCTCTTCCGATCTGGAACCACTGGGTCAGAT
C3	Non-reading	5'	ACTGGAGTTCAGACGTGTGCTCTTCCGATCT	GAATAAAAACTTGAGTAGCATG	3'	ACTGGAGTTCAGACGTGTGCTCTTCCGATCTGAATAAAAACTTGAGTAGCATG

Table S3. 4C-seq primers for PGJB2 and C3 viewpoints, related to Figure 3.

Lists of primers used for 4C-seq PCR.

cCRE	Direction	Orientation	Specific primer
P*GJB2*	Forward	5'	CGGTGAATTTAAAACGTTTGGTGGC
P*GJB2*	Reverse	5'	CCGCAGAATCCTATCAGTTTCC
-625-L	Forward	5'	CTTTAGGAGAGCTCTCAGTCAG
-625-L	Reverse	5'	GATCTTTCGCCTGTCTCCATAG
-625-R	Forward	5'	GATACTGCCACAGTAACTGAGG
-625-R	Reverse	5'	GGATCACACATCTGCTAGCTAC

Table S4. PCR primer sequences used for cloning into the luciferase reporter construct (5' - 3'), related to Figure 4.