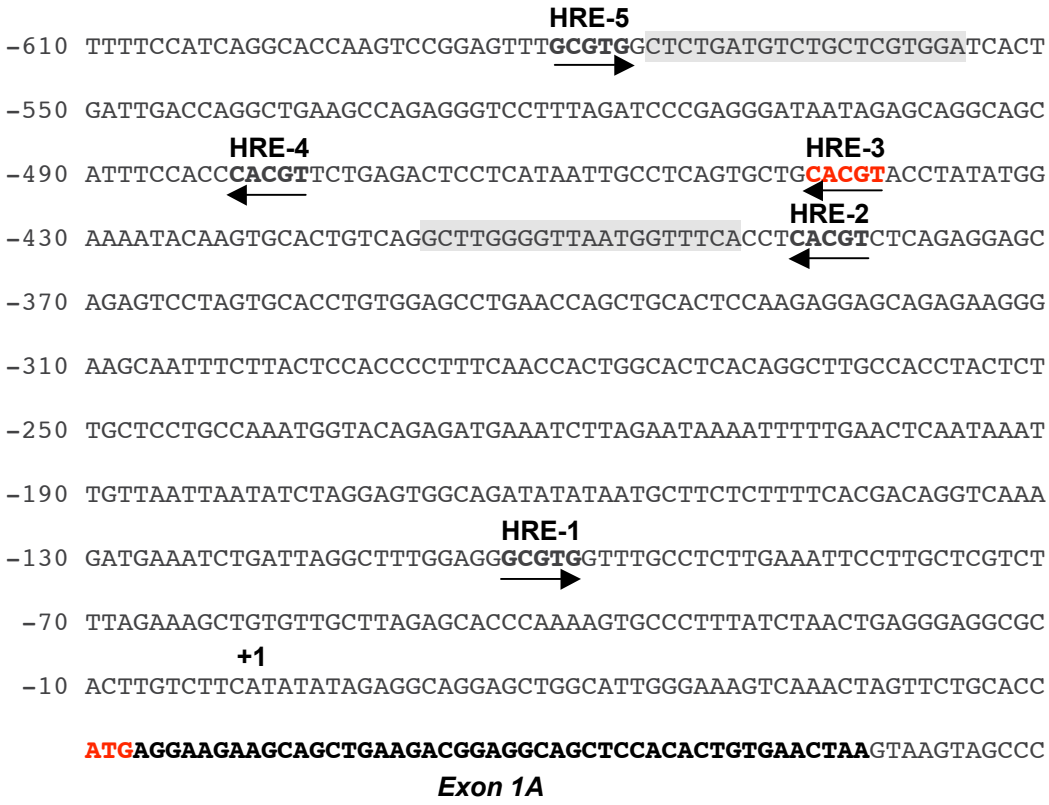
A



B

	HRE-5	HRE-4	HRE-3	HRE-2	HRE-1
Homo_sapiens	AGTTTGCGTGGCTCT	CCACCCACGTTCTGA	TGCTGCACGTACCTA	ACCTCACGTCTCAG	GGAGGGCGTGGTTTG
Pan_troglodytes	AGTTTGTGTGGGTCT	CCACCCACGTTCTGA	TGCTGCACGTACCTA	ACCTCACGTCTCAG	GGAGGGCGTGGTTTG
Pongo_pygmaeus	AGTTTGCAGGGCTCT	CCACCCATGCTCTGA	TGCTGCACGTACCTA	ACCTCACGTCTCAG	GGAGGGCGTGGTTTG
Macaca_mulatta	AGTTTGCGTGGCTCT	CCACCCACGCTCTGA	TGCTGCACGTACCTA	ACCTCACGTCTCAG	GGAGGGCGTGGTTTG
Mus_musculus	GTTCTGCC-CATTTT	CCACCTTTACTTTGA	TGTGGCACGTAC-TG	ACCTCCCTTCTCAC	GAAGGGTGCGGTTTG
Rattus_norvegicus	ATTCTGCCTCACTTT	CCACCTCTGCTTTGA	TGTGGCACGTAC-TG	ACCTCCCGTCTCAC	GAAGGGTGCGGTTTG
Equus_caballus	GGTTTGCATGGCTTT	TCAATCATACTCTGA	TGCTGCACGTACCTA	GGCTCACGTCTCAG	GAAGGGTGTGGTTTG
Canis_familiaris	GGTTTGCATGGCTTT	TTACTCACACTCTGA	TGCTGCACGTACCTA	AGCCTACACCTTAG	GAGGGGTGTGGCTTG
Bos_taurus	TCTCGGGTTTGTGTG	TTACCTATACTCTGA	CACTGCACGTACCTA	ACTTTACGTTTCAG	GAAGGGTGTGGTTTG

Figure S1

Promoter sequence of DMT1-1A. (**A**) Presence of 5 HREs (Hypoxia Responsive Element) in the promoter of DMT1. HRE consensus sequences are indicated in bold. Arrows indicate the forward or reverse position of the HREs. Gray boxes represent primers used for ChIP. +1 = transcription start site. (**B**) Conservation of HREs (in red) among eutherian mammals.

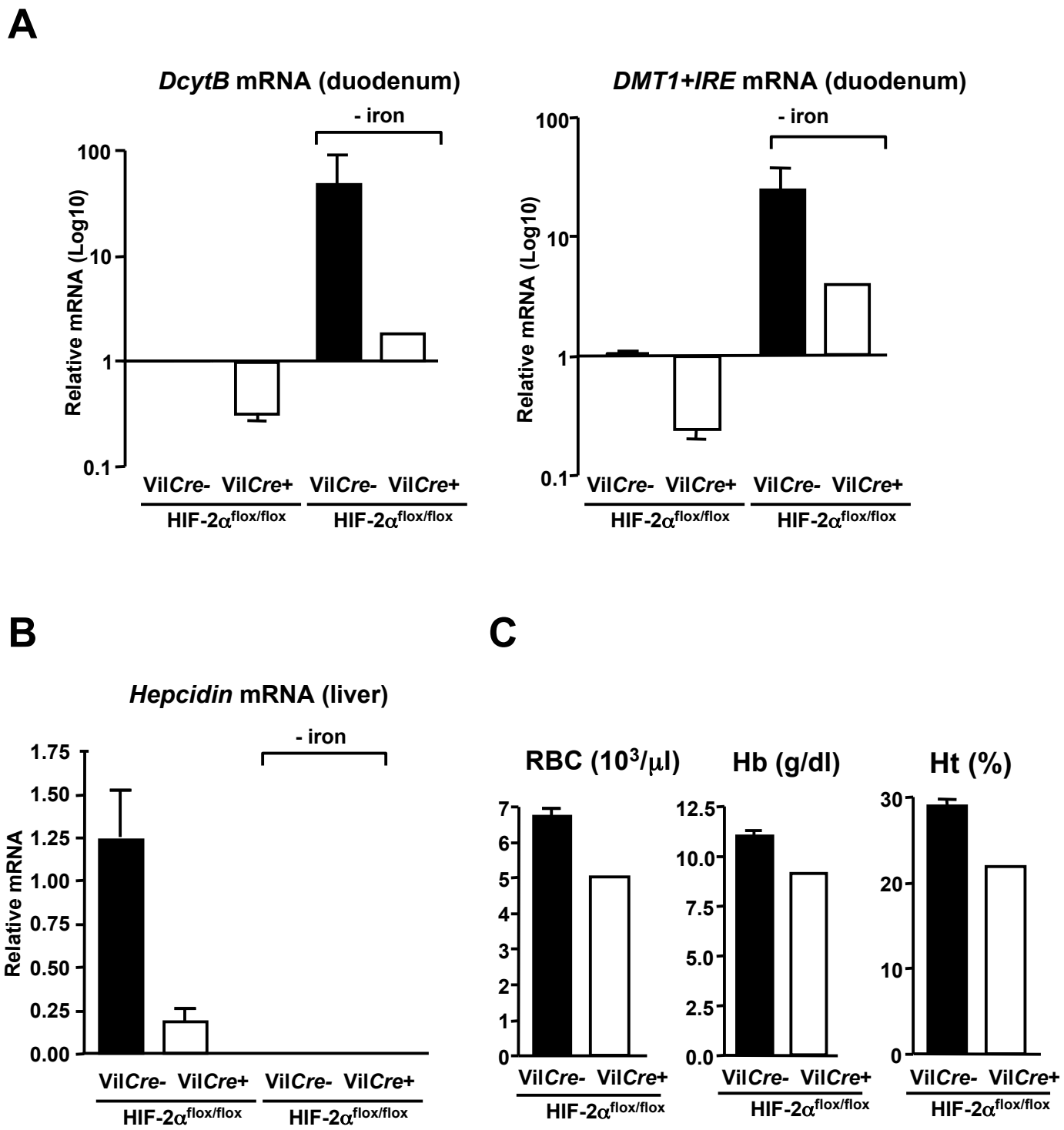


Figure S2

(**A**) *DMT1+IRE* and *Dcytb* mRNA levels in duodenum scrapings from vil-cre+/HIF-1$\alpha^{flox/flox}$, vil-cre+/HIF-2$\alpha^{flox/flox}$ mice and WT littermates under normal or 2 months iron restricted diet as determined by RT-PCR. (**B**) *Hepcidin* mRNA levels in liver from vil-cre+/HIF-2$\alpha^{flox/flox}$ mice and WT littermates under normal or 2 months iron restricted diet as determined by RT-PCR. (**C**) Blood parameters of vil-cre+/HIF-2$\alpha^{flox/flox}$ mice and WT littermates after 2 months iron restricted diet.

Primers used in real-time PCR		
gene	**Forward**	**Reverse**
HEPC1	5’-CCTATCTCCATCAACAGATG-3’	5’-AACAGATACCACACTGGGAA-3’
DMT1+IRE	5’-TGTTTGATTGCATTGGGTCTG-3’	5’-CGCTCAGCAGGACTTTCGAG-3’
DMT1-IRE	5’-TCCTGGACTGTGGACGCTC-3’	5’-GGTGTTCAGAAGATAGAGTTCAGG-3’
DCYTB	5’-ACGGTTCTCATGGGAGTGAC-3’	5’-GAAGGCCCAGCGTATTTGTA-3’
FN-1	5’-CTACCATTAGAAGGATTGACCAGCTA-3’	5’-ACTGGAGAACCAAATGTCATAATCTG-3’
Glut-1	5’- GGGCATGTGCTTCCAGTATGT-3’	5’- ACGAGGAGCACCGTGAAGAT-3’
18S	5’- GTAACCCGTTGAACCCCATT -3’	5’- CCATCCAATCGGTAGTAGCG -3’

Primers used for CHIP		
name	**Forward**	**Reverse**
DMT1 (HRE)	5'-CTCTGATGTCTGCTCGTGGA-3'	5'- TGAAACCATTAACCCCAAGC -3'
c-Myc (negative control)	5'-GGGCTGTGTTTAGAGGCTAGG-3'	5'-CACCCACTCTTGAGGCAGTT-3'

Primers used for DMT1-1A cloning and HRE mutagenesis		
name	**Forward 5’-3’**	**Reverse 5’-3’**
DMT1-1A	CTAGGCTTGCC**CTCGAG**TTCTGTCTTGTAGTCTCTG XhoI	GGTGCAGAAC**AAGCTT**GACTTTCCCAATGCCA HindIII
HRE1-DMT1	GGCTTTGGAGGG**CTCGAG**TTGCCTCTTG XhoI	CAAGAGGCAA**CTCGAG**CCCTCCAAAGCC XhoI
HRE2-DMT1	TAATTGGTTTCACCT**CTCGAG**TCAGAGGAGCAGAG XhoI	CTCTGCTCCTCTGA**CTCGAG**AGGTGAAACCAATTA XhoI
HRE3-DMT1	CATAATTGCCTCAGTGCTG**CTCGAG**CCTATATGGAAAAT XhoI	ATTTTCCATATAGG**CTCGAG**CAGCACTGAGGCAATTATG XhoI
HRE4-DMT1	CAGCATTTCCACC**CTCGAG**CTGAGACTCCTCA XhoI	TGAGGAGTCTCAG**CTCGAG**GGTGGAAATGCTG XhoI
HRE5-DMT1	CAAGTCCGGAGTTT**CTCGAG**CTCTGATGTCTGC XhoI	GCAGACATCAGAG**CTCGAG**AAACTCCGGACTTG XhoI

Table S1

Primers used for real-time PCR, Chromatin Immunoprecipitation (ChIP) and cloning