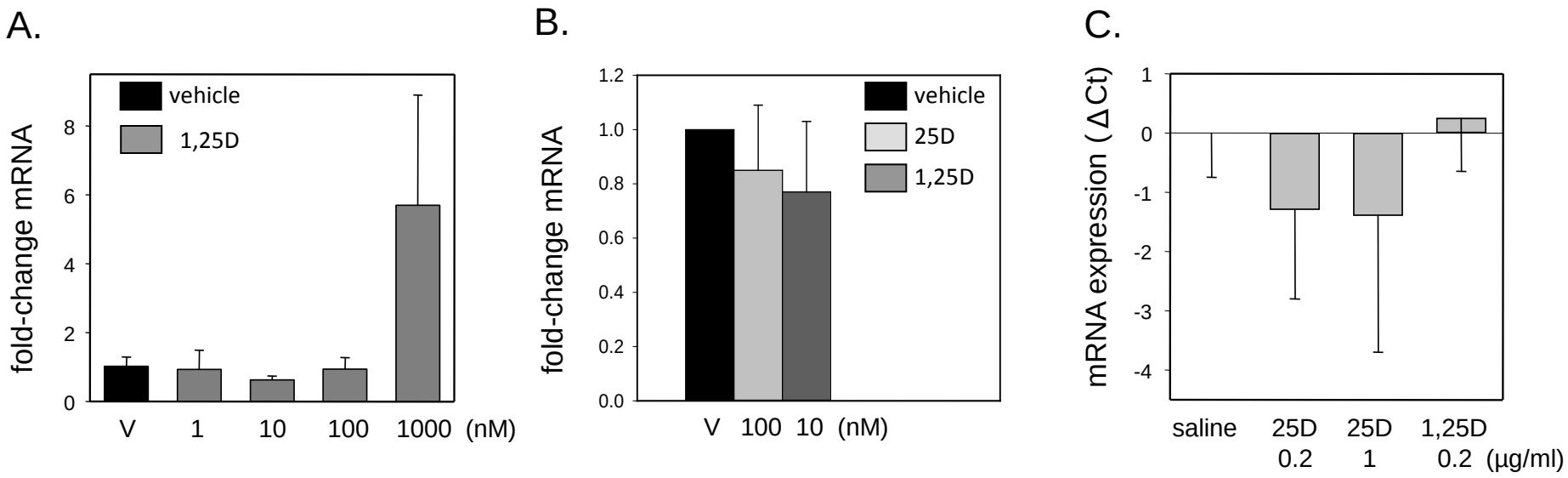
Supplemental Table 1. In silico nuclear receptor site prediction for vitamin D response elements in the *HAMP* gene promoter (-1071 bp) For general nuclear receptor target prediction the NubiScan program (www.nubiscan.unibas.ch) was used. A -1071bp *HAMP* gene promoter sequence was analyzed using the general weighted matrix for nuclear receptor halfsites (including the VDR canonical halfsites), whereby direct-repeat 3 sites were acquisitioned. For the search parameter, an automatic scan with a raw score threshold of 0.5 was used, where the optimal match would have a raw score of 1.

SEQUENCE LENGTH	POSITION	STRAND	RAW SCORE	P VALUE	SITE SEQUENCE
1071	72	-	0.602588	0.132854	AGTCCGatgAGTACA
1071	952	+	0.596919	0.259562	AGGGGAgggGGCTCA
1071	422	-	0.564744	0.580772	TGGCCAtaaATGACA
1071	903	-	0.564162	0.457681	AGATAAgcgGGAACA
1071	649	+	0.526702	0.868162	TGTGCAtgtAGGCGA
1071	193	-	0.525093	0.687983	AGCCCAggaGGCTGA
1071	10	+	0.507491	0.791509	GGCTGAgttGGTGCA



Supplemental Figure 1. **Effect of vitamin D on expression of hepcidin in mice**. S1A. Peripheral blood-derived monocytes from wild type C57BL/6 mice showed no change in mouse hepcidin (*Hamp*) gene expression following 24 hr treatment with increasing doses of 1,25D (1-100 nM). S1B. Similar results were also observed for the mouse monocyte cell line J774 following 6 hr treatment with 25D (100 nM) or 1,25D (10 nM) . S1C. To assess possible effects of vitamin D on hepatic expression of *Hamp* in vivo, 12 wk old C57BL/6 male mice were placed on a vitamin D-deficient diet for 6 weeks then transferred to a 4 parts per million (ppm) iron diet for one week. Groups of mice (n=4 in each case) were then treated with either 0.2 µg/g body weight of 25D by intraperitoneal (IP) injection, 1 µg/g 25D IP, 0.2 µg/g of 1,25D IP. A similar volume of saline IP (saline) was used as a control. Analysis of liver mRNA in these mice 24 hours after treatment showed no effect on expression of *Hamp*.