

Table S1 (related to Figure 1). Peripheral blood contribution from drug-treated bone marrow cells. CD45.1 chimerism for myeloid, T, and B cells for each recipient mouse. Bolded rows show animals with greater than 1% multilineage chimerism.

	Myeloid	T cells	B cells
DMSO control_1	0.36	0.23	0.27
DMSO control_2	0.67	1.58	0.36
DMSO control_3	0.16	0	0.52
DMSO control_4	0.46	1.1	0.4
DMSO control_5	0	0	0.11
DMSO control_6	9.92	28.7	26.1
DMSO control_7	0.67	0	0.27
DMSO control_8	0.65	0	0.66
DMSO control_9	0	0.071	0.15
DMSO control_10	0.68	2.5	0.98
DMSO control_11	0.073	0.19	0.2
DMSO control_12	0.67	3.55	5.97
DMSO control_13	0	0	2.01
DMSO control_14	0.055	1.52	0.35
DMSO control_15	1.79	1.82	1.96
DMSO control_16	0.64	0.056	0.41
DMSO control_17	1.55	0.11	0.55
DMSO control_18	0.55	0.078	0.079
DMSO control_19	0.079	0	0.95
DMSO control_20	0.41	0	0.06
DMSO control_21	0.85	3.17	0.57
BIO only_1	0	2.15	0
BIO only_2	1.88	4.91	5.47
BIO only_3	17	5.25	6.39
BIO only_4	1.06	0.96	3.1
BIO only_5	6.11	2.93	2.22
BIO only_6	1.14	7.11	7.92
BIO only_7	0	0	0.17
BIO only_8	3.11	10	33.4
BIO only_9	0	0	0.089
BIO only_10	0	0	0.092
BIO only_11	0.15	0	0.094

BIO only_12	0.43	0.27	0.59
BIO only_13	0.9	1.81	1.56
BIO only_14	2.95	8.9	22.3
BIO only_15	0.08	0.058	0.11
BIO only_16	0.33	0.13	0.22
BIO only_17	0	0	0.39
BIO only_18	1.02	0	0.071
BIO only_19	3.99	2.89	3.38
BIO only_20	0.68	0.071	0.19
DM only_1	0.97	1.87	0.48
DM only_2	0	0.055	0.2
DM only_3	1.44	0	0.62
DM only_4	0.05	0.055	0.2
DM only_5	0.13	0.058	0.046
DM only_6	0.36	0.086	0.77
DM only_7	0.13	0	0.071
DM only_8	0.043	0	1.09
DM only_9	1.85	0.068	0.31
DM only_10	0.57	1.26	1.64
DM only_11	0	0.084	0.38
DM only_12	0.22	0.1	1.21
DM only_13	0.46	15.6	2.36
DM only_14	0.65	0	0.26

Table S2 (related to Figures 1,2). List of primers

List of primers used for zebrafish WKM Q-RTPCR.		
	Forward Primer	Reverse Primer
scl	CTCGAATGGTGCAGTTGAGTCC	GCATCTCCAGCAAACCACTGT
runx1	CGTCTTCACAAACCCTCCTCAA	GCTTTACTGCTTCATCCGGCT
cmyb	TGATGCTTCCCAACACAGAG	TTCAGAGGGAATCGTCTGCT
gata2	ACAACGTCAACAGGCCACTGA	TCGAAACCCTCACCAGATCGT
smad6	CATCCTCCTCAGCAAAGAGC	TAGGGGTGATGCTCCAGAGT
smad7	ACACTGGACAATCCCGACTC	AAGTCGAAGGCTTTGATGGA
beta-actin	GCTGTTTTCCCCTCCATTGTT	TCCCATGCCAACCATCACT
gapdh	CCAATGTCTCTGTTGTGGA	AACCTGGTGCTCCGTGTATC
Id1	GGAGCTAGCCAGCATCTCTG	TCTGCTTTAACGGCACATGA
axin2	CCTTACCCTCGGACACTTCA	CTCGAACACAGCACCACACT
cyclind1	TCTCATCCCAGAACCTCACC	CTGACACGATCGCAGACAGT
bmp2b	CCAGCAGAGCAAACACGATA	ACTGCTGCGTTGTTTTTCT
wnt8a.1	TGGAGTTATGTACACTTTGACGAAA	AGTCGACCAGCTTCGTTGTTAT
List of primers used for sequential CHIP in human		
CPOX	ACAAAACCGCAAACAAACC	AACATGGACCTGCCAAAAAG
EPB4.1	TTCACAGCAAGTCTGGCTTCAGAGC	ACACCCTCCCAACTCAAACCCCT
LYL1	TGATAAGGAGCCTGGCTGAC	AGCTTCCCTGCCTCAGTTTA
GATA2	CCCGGCGAAGATAATGAATA	TCTCTGAAAGGGCTCCGATA
HEMGN	TCCCTCCTCTGGAATCCTCCCACA	GGGGAGGCTCAAGGTGGGACC
ACTIN	CCCACCCAGCACATTTAGCT	AGCAACTGCCCTGAAAGCA
List of primers for CHIP-PCR after irradiation in mouse		
Cd9	CCCTTTCCGTTCTTTCTCC	AATGTGCCCAATCCTATTGC
Il13	AGTGGAACGGTGGTAAGCTG	ACAGCACAGGGTCTCCATCT
Mapk6	CTAGAAGCATCCGCGGTAAC	TTGCTCAGTTTTCCAGGAC
Meis1	CAAACCCTTCATCAGCCAAT	GTGTGGTGGGGAGAGACTGT
Gapdh	AATGCATCCTGCACCACCAACTGCTT	AGTGATGGCATGGACTGTGGTCAT

**Table S3 (related to Figures 2,3,4,5,6,7). Summary of bound regions and bound genes for all
ChIP-Seq experiments.**

Cell type-Factor	Bound regions	Bound genes within 5 kb of gene body
K562_GATA1	10172	5505
K562 bio_GATA1	13652	6265
K562 bmp_GATA1	12579	5906
K562_GATA2	24970	10042
K562bio_GATA2	20745	10066
K562 bmp_GATA2	8097	4501
K562_SMAD1	12059	6604
K562_TCF7L2	5096	3248
K562 bmp_H3K4me1	45650	11742
K562 bio_H3K4me1	16302	8456
K562 C/EBP α _C/EBP α	2006	1331
K562 C/EBP α _SMAD1	1644	1678
U937_C/EBP α	28900	10721
U937bio_C/EBP α	39373	12377
U937bmp4_C/EBP α	12481	6353
U937_SMAD1	29297	9029
U937_TCF7L2	6103	4199
CD34 pro_GATA2	31317	11182
CD34 pro_TCF7L2	10504	5860
CD34 pro_SMAD1	19772	8094
CD34 ery_GATA1bmp	15658	7986
CD34 ery_GATA1bio	14562	7749
CD34 ery_SMAD1	3642	2683

G1E_GATA2	15433	5892
G1E_SMAD1	8998	3934
G1ER_GATA1	10354	4531
G1ER_SMAD1	1586	1010