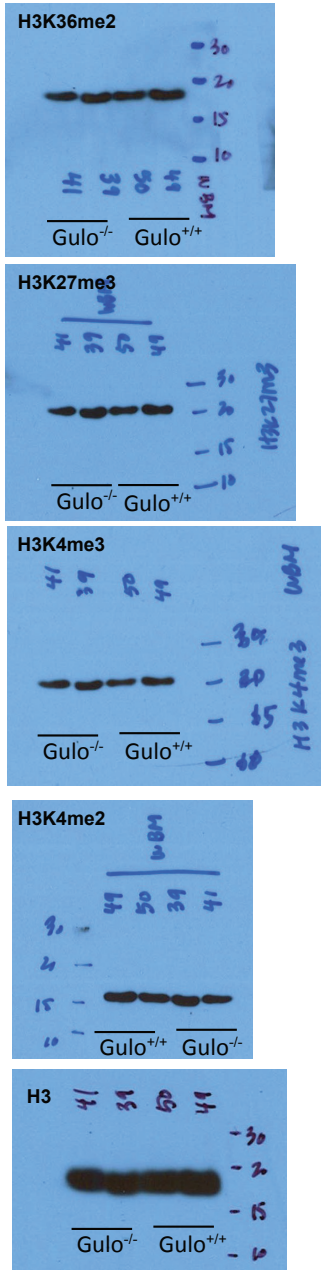


SUPPLEMENTARY INFORMATION

doi:10.1038/nature23876

Extended data Figure 4a

The orientation of some gels has been flipped to improve the readability of the notation



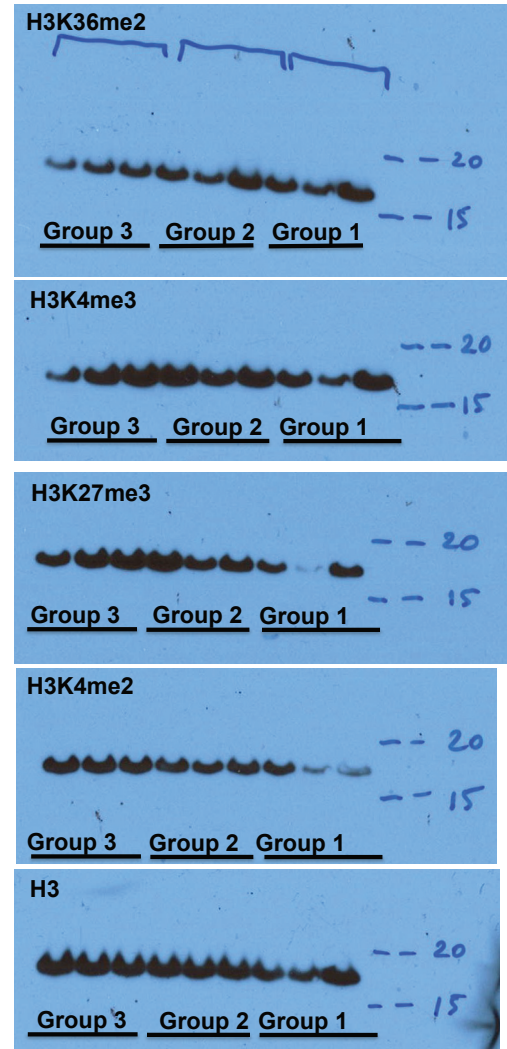
Extended data Figure 10c

Group 1: +/+ to +/+

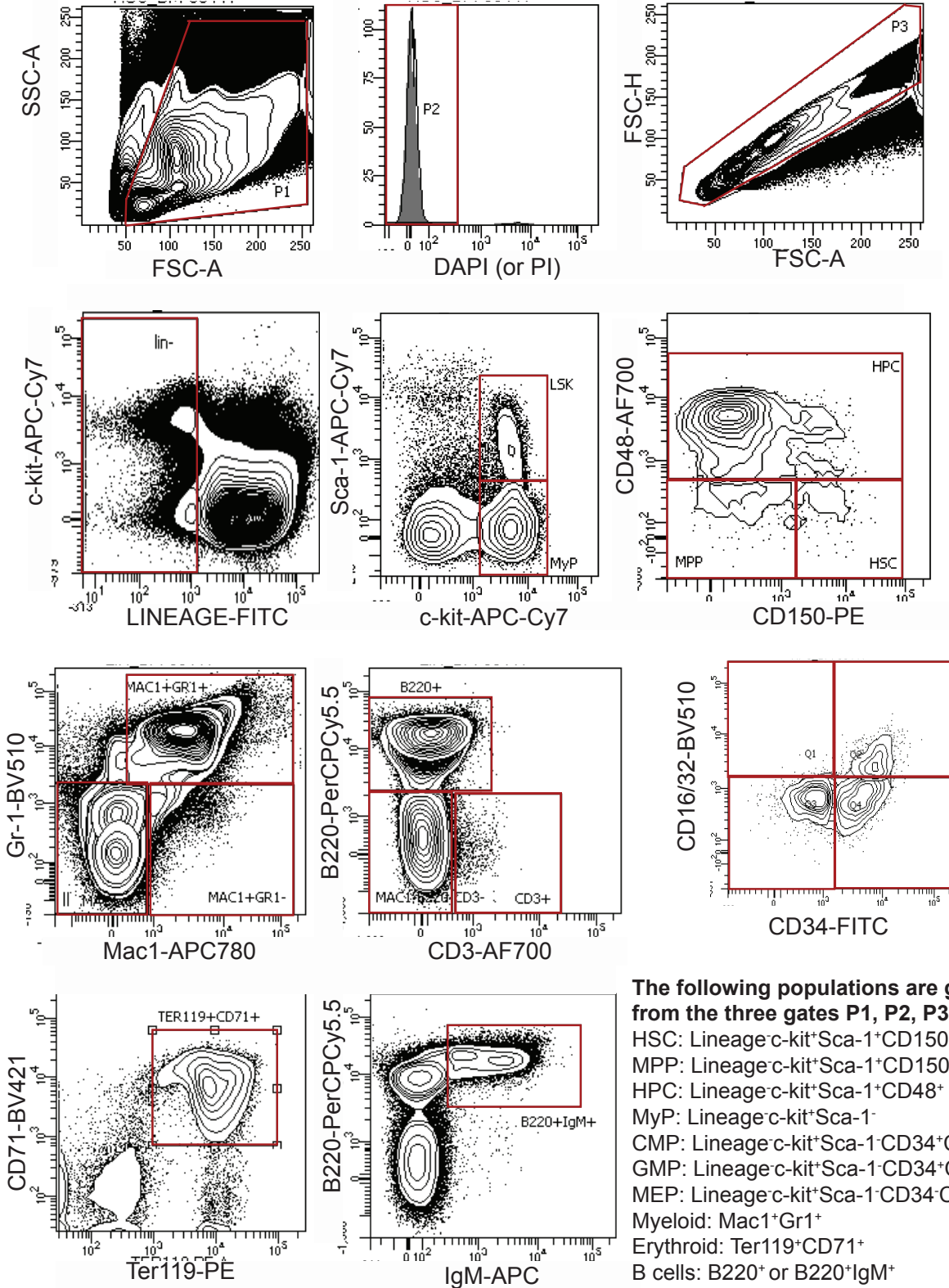
Group 2: Tet2^{Δ/+};Flt3^{ITD/+} to +/+

Group 3: Tet2^{Δ/+};Flt3^{ITD/+} to *Gulo*^{-/-}

ED Figure 10c shows data from Groups 2 and 3



Typical flow cytometry plots and gates that are used to identify the cell populations listed in the bottom right corner



The following populations are gated from the three gates P1, P2, P3 in the top row
 HSC: Lineage⁻c-kit⁺Sca-1⁺CD150⁺CD48⁻
 MPP: Lineage⁻c-kit⁺Sca-1⁺CD150⁺CD48⁻
 HPC: Lineage⁻c-kit⁺Sca-1⁺CD48⁺
 MyP: Lineage⁻c-kit⁺Sca-1⁻
 CMP: Lineage⁻c-kit⁺Sca-1⁻CD34⁺CD16/32⁻
 GMP: Lineage⁻c-kit⁺Sca-1⁻CD34⁺CD16/32⁺
 MEP: Lineage⁻c-kit⁺Sca-1⁻CD34⁺CD16/32⁻
 Myeloid: Mac1⁺Gr1⁺
 Erythroid: Ter119⁺CD71⁺
 B cells: B220⁺ or B220⁺IgM⁺
 T cells: CD3⁺

Name	Clone	Supplier	Catalogue #	Lot #
<u>Flow cytometry antibodies (for mouse cells)</u>				
CD2	RM2-5	TONBO biosciences	35-0021	C0021031114353
CD3 ϵ	17A2	TONBO biosciences	35-0032	C003203817353
CD4	GK1.5	eBioscience	11-0041-85	E00079-1631
CD5	53-7.3	BioLegend	100606	b210716
CD8 α	53-6.7	TONBO biosciences	35-0081	c0081060514354
CD11b	M1/70	eBioscience	17-0112-83	4305916
CD16/32	93	BioLegend	101333	B228805
CD24	M1/69	BioLegend	101822	B211998
CD25	PC61.5	TONBO biosciences	65-0251	C0251102115653
CD34	RAM34	eBioscience	50-0341-82	4273958
CD43	eBioR2/60	eBioscience	11-0431-82	4298067
CD44	IM7	BioLegend	103030	B193069
CD45.1	A20	TONBO biosciences	75-0453	C0453092316753
CD45.2	104	BioLegend	109806	B180276
CD45R/B220	RA3-6B2	TONBO biosciences	35-0452	C0452011017354
CD48	HM48-1	BioLegend	103426	B236445
CD71	R17217	eBioscience	12-0711-83	E01341-1634
CD117/cKit	2B8	eBioscience	47-1171-82	4292975
CD127/IL7R α	A7R34	TONBO biosciences	50-2171	C1271052316503
CD135/Flt3	A2F10	eBioscience	12-1351-83	E01495-1632
CD150	TC15-12F12.2	BioLegend	115904	B210719
Ter119	TER-119	BioLegend	116206	B208450
Sca1	D7, E13-161.7	BioLegend	122514	B194434
Gr-1	RB6-8C5	BioLegend	108406	B210647
IgM	II/41	eBioscience	17-5790-92	4273397
F4/80	BM8	BioLegend	123110	B202562
<u>Flow cytometry antibodies (for human cells)</u>				
CD34	4H11	eBioscience	17-0349-42	E11634-1634
CD45RA	HI100	eBioscience	12-0458-42	E13995-103
CD38	HIT2	eBioscience	25-0389-42	E10874-1635
Lineage marker mix CD2, CD3, CD14, CD16, CD19, CD56, CD235A				
	various	Thermo Fisher	22-7778-72	4325064
<u>Western Blot antibodies</u>				
β -actin	AC-74	Sigma	A2228	various
histone H3	ab1791	Abcam	ab1791	GR265016-1
H3K4me3	C42D8	Cell Signaling	9751	7
H3K27me3	C36B11	Cell Signaling	9733	8
H3K4me2	C75H12	Cell Signaling	2901	1
H3K36me2	C64G9	Cell Signaling	9725	1