

Table S1 for Figure 1A

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
-	-	10^6	60 h	12	BM
NCI	5×10^5	10^6	60 h	6	BM
	10^6	10^6	60 h	6	BM
U266	5×10^5	10^6	60 h	12	BM
	10^6	10^6	60 h	12	BM
RPMI	5×10^5	10^6	60 h	12	BM
	10^6	10^6	60 h	12	BM

Table S2 for Figures 1B & C

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
-	-	10^6	16 w	6	Blood/BM
RPMI	5×10^5	10^6	16 w	6	Blood/BM
	10^6	10^6	16 w	6	Blood/BM
	3×10^6	10^6	16 w	6	Blood/BM

Table S3 for Figure 1D

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
-	-	10^6	60 h	12	OS/VS
NCI	5×10^5	10^6	60 h	6	OS/VS
	10^6	10^6	60 h	6	OS/VS
U266	5×10^5	10^6	60 h	9	OS/VS
	10^6	10^6	60 h	9	OS/VS
RPMI	5×10^5	10^6	60 h	12	OS/VS
	10^6	10^6	60 h	12	OS/VS

Table S4 for Figure 1E

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
-	-	10^6	16 w	6	OS/VS
RPMI	5×10^5	10^6	16 w	6	OS/VS
	10^6	10^6	16 w	6	OS/VS
	3×10^6	10^6	16 w	6	OS/VS

Table S5 for Figure 2B

Type of MM	# of MM cells injected	Mouse pretreated	Time	# of mouse	Tissue examined
RPMI8226	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI8226	10 ⁶	AMD3100	60 h	3	OS / VS

Table S6 for Figure 2C

Type of MM	# of MM cells injected	Mouse pretreated	Time	# of mouse	Tissue examined
RPMI8226	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI8226	10 ⁶	PTH	60 h	3	OS / VS
U266	10 ⁶	Vehicle	60 h	3	OS / VS
U266	10 ⁶	PTH	60 h	3	OS / VS

Table S7 for Figure 3A

Type of MM	# of MM cells injected	Time	# of mouse	Tissue examined
RPMI8226 TRIM44 ^{OE-CON}	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE}	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE-CON}	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE}	10 ⁶	60 h	3	OS / VS

Table S8 for Figure 3B

Type of MM	# of MM cells injected	Time	# of mouse	Tissue examined
RPMI8226 TRIM44 ^{KD-CON}	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{KD}	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{KD-CON}	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{KD}	10 ⁶	60 h	3	OS / VS

Table S9 for Figures 3C & D

Type of MM	# of MM cells injected	Mouse pretreated	Time	# of mouse	Tissue examined
U266 TRIM44 ^{OE-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
U266 TRIM44 ^{OE}	10 ⁶	Vehicle	60 h	3	OS / VS
U266 TRIM44 ^{KD-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
U266 TRIM44 ^{KD}	10 ⁶	Vehicle	60 h	3	OS / VS
U266 TRIM44 ^{OE-CON}	10 ⁶	PTH	60 h	3	OS / VS
U266 TRIM44 ^{OE}	10 ⁶	PTH	60 h	3	OS / VS
U266 TRIM44 ^{KD-CON}	10 ⁶	PTH	60 h	3	OS / VS
U266 TRIM44 ^{KD}	10 ⁶	PTH	60 h	3	OS / VS
RPMI TRIM44 ^{OE-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI TRIM44 ^{OE}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI TRIM44 ^{KD-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI TRIM44 ^{KD}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI TRIM44 ^{OE-CON}	10 ⁶	PTH	60 h	3	OS / VS
RPMI TRIM44 ^{OE}	10 ⁶	PTH	60 h	3	OS / VS
RPMI TRIM44 ^{KD-CON}	10 ⁶	PTH	60 h	3	OS / VS
RPMI TRIM44 ^{KD}	10 ⁶	PTH	60 h	3	OS / VS

Table S10 for Figure 3E

Type of MM	# of MM cells injected	Mouse pretreated	Time	# of mouse	Tissue examined
RPMI8226 TRIM44 ^{OE-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE-CON}	10 ⁶	Vehicle	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE}	10 ⁶	AMD3100	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE}	10 ⁶	AMD3100	60 h	3	OS / VS

Table S11 for Figure 4A

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
RPMI8226 TRIM44 ^{OE-CON}	0.5x10 ⁶	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE-CON}	10 ⁶	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE}	0.5x10 ⁶	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{OE}	10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE-CON}	0.5x10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE-CON}	10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE}	0.5x10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{OE}	10 ⁶	10 ⁶	60 h	3	OS / VS

Table S12 for Figure 4C

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
RPMI8226 TRIM44 ^{KD-CON}	10 ⁶	10 ⁶	60 h	3	OS / VS
RPMI8226 TRIM44 ^{KD}	10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{KD-CON}	10 ⁶	10 ⁶	60 h	3	OS / VS
U266 TRIM44 ^{KD}	10 ⁶	10 ⁶	60 h	3	OS / VS

Table S13 for Figure 5A

Type of MM	# of MM cells injected	# of CD34+ HSCs injected	Time	# of mouse	Tissue examined
-	-	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE-CON}	0.5x10 ⁶	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE-CON}	10 ⁶	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE-CON}	3x10 ⁶	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE}	0.5x10 ⁶	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE}	10 ⁶	10 ⁶	16 w	3	OS / VS
RPMI8226 TRIM44 ^{OE}	3x10 ⁶	10 ⁶	16 w	3	OS / VS

Table S14. Primer sequences for real time-PCR reactions used in the article.

Gene	Sense	Anti-sense
Real-time PCR		
TRIM44	AGGCAGCTCATCTGTGTCCT	TGCTCCTCATCAGCAATCAC
VEGF	GGAGTGTGTGCCACCGAGGA GTCCAAC	GGTCCCGAAACCCTGAGGGA GGCT
GLUT1	CTACAACACTGGAGTCATCAAT GC	GGCCAGCAGGTTTCATCAG CAT
MMP9	GAGTGGCAGGGGGAAGATGC	CCTCAGGGCACTGCAGGATG
ACTB	GGACTTCGAGCAAGAGATGG	AGCACTGTGTTGGCGTACAG