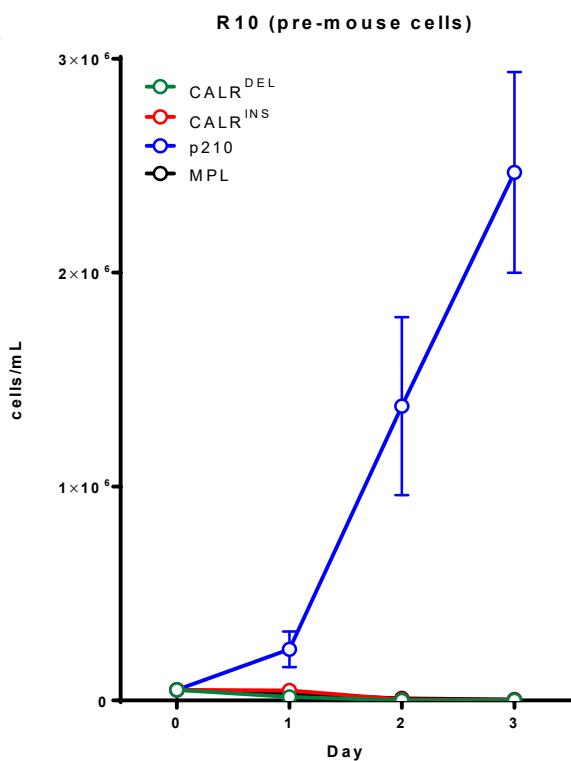
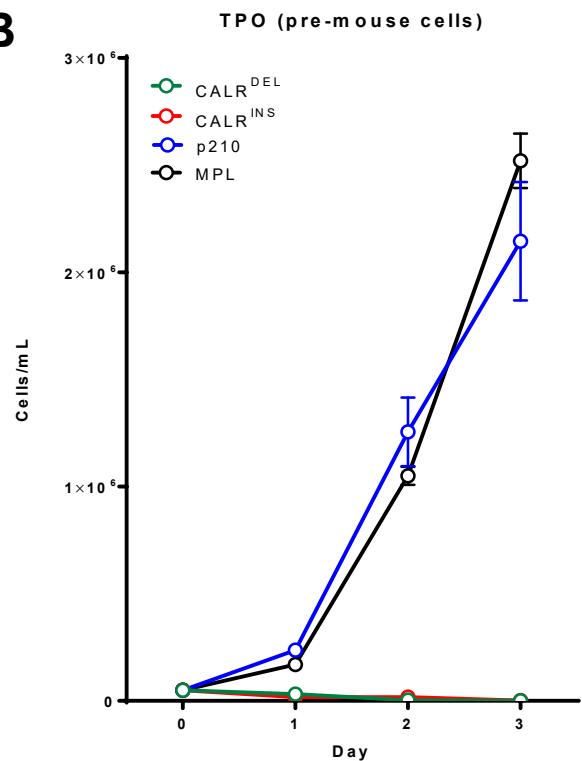
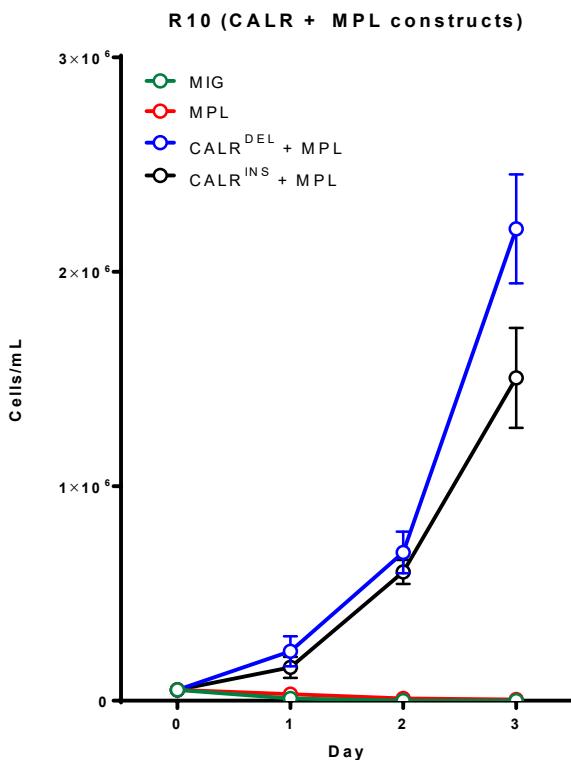
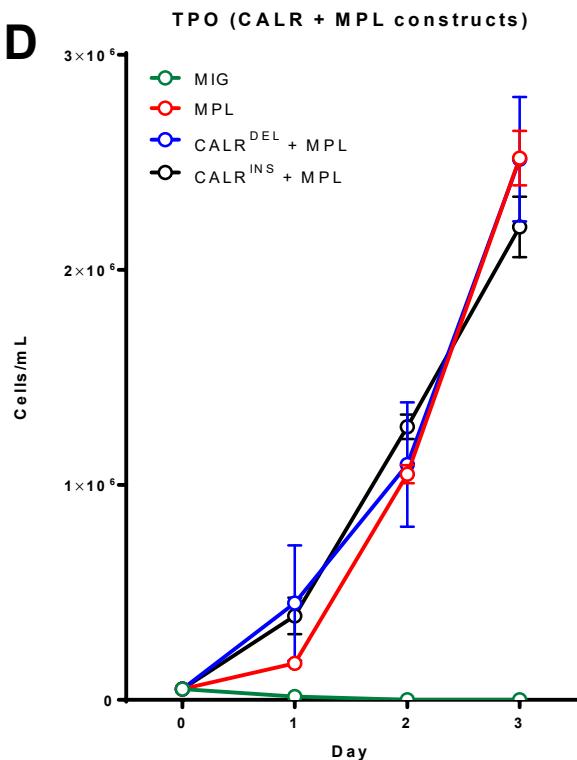


**A****B****C****D**

**Supplemental Figure 1. CALR mutant Ba/F3 cells are not cytokine independent without MPL.** Ba/F3 cells were created expressing empty vector, CALR<sup>DEL</sup>, or CALR<sup>INS</sup>, CALR<sup>DEL</sup> + MPL, CALR<sup>INS</sup> + MPL, or p210.  $5 \times 10^4$  cells were placed in either RPMI + 10% FBS (R10) media without cytokines (A and C) or R10 + 10ng/mL TPO (B and D) and cells were counted daily.

Mouse #	Type of cells injected	Days post-transplant sacrificed or found dead	%GFP in peripheral blood	%GFP in bone marrow	%GFP in spleen
389	CALR <sup>DEL</sup>	51	50.7	ND	ND
502	CALR <sup>DEL</sup>	42	42.2	33.3	28.7
521	CALR <sup>INS</sup>	55	15.5	19.6	17.1
774	CALR <sup>INS</sup>	81	63.2	33.0	49.0

ND = Not Determined

**Supplemental Table 1.** Information on mice with expansion of CALR<sup>DEL</sup> or CALR<sup>INS</sup> Ba/F3 cells at sacrifice

	mIL-3	mIFN-γ	mGMCSF	mTPO	mIL-11	mSCR	mMCSF	mIL-7	mEPO	no cytokines
Post-mouse CALR <sup>DEL</sup> (389)	Green	Red	Red	Green	Red	Red	Red	Red	Red	Green
Post-mouse CALR <sup>DEL</sup> (502)	Green	Red	Red	Green	Red	Red	Red	Red	Red	Green
Post-mouse CALR <sup>INS</sup> (774)	Green	Red	Red	Green	Red	Red	Red	Red	Red	Red
Post-mouse CALR <sup>INS</sup> (521)	Green	Red	Red	Green	Red	Red	Red	Red	Red	Red

GROWTH
NO GROWTH

**Supplemental Table 2.** Growth of post-mouse cell lines with specific cytokines