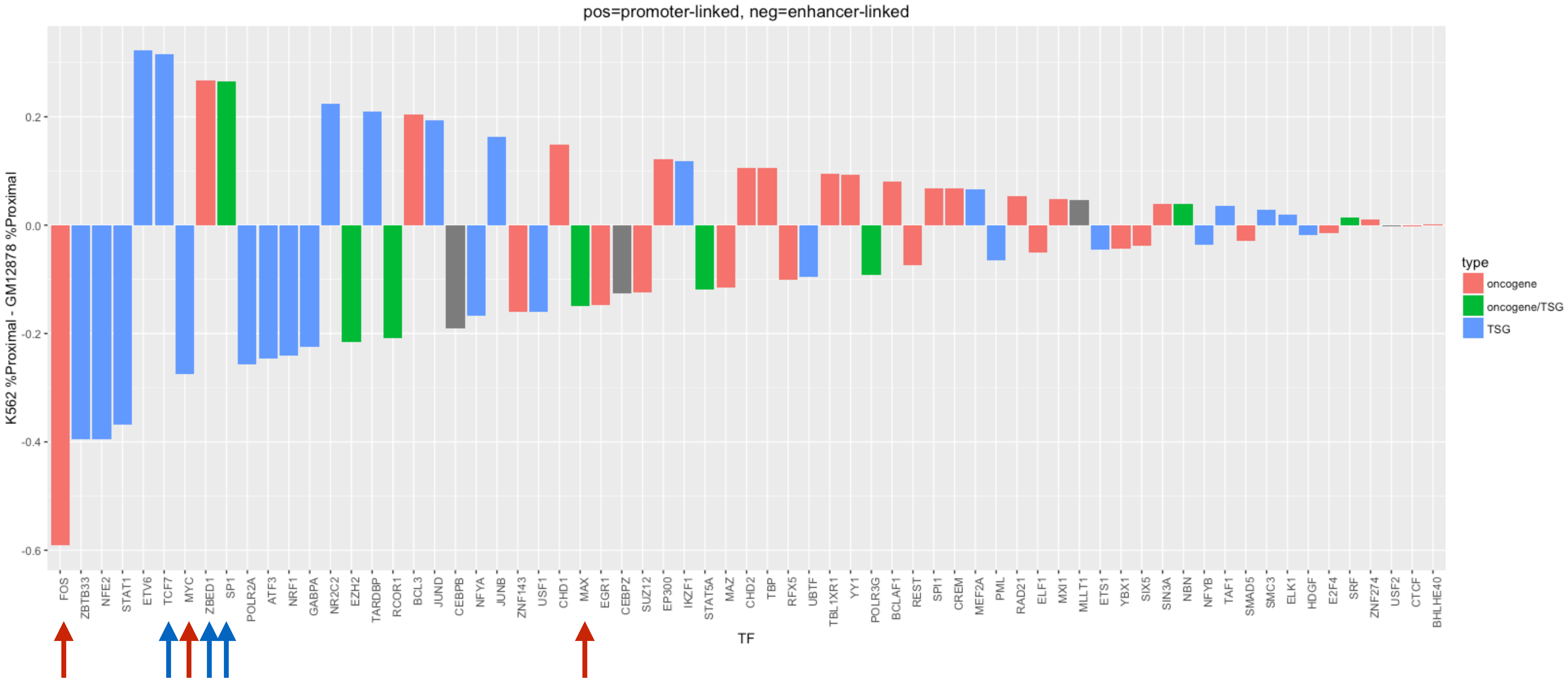
	ARID3A	ARNT	ATF1	ATF2	ATF3	BACH1	BATF	BCL11A	BCL3	BCLAF1	BCOR	BDP1	BHLHE40	BMI1	BRCA1	BRF1	BRF2	C11orf30	CBFB	CBX1	CBX3	CBX5	CCNT2	CDC5L	CEBPB	CEBPD	CEBPZ	CHAMP1	CHD1	CHD2	COPS2	CREB3L1	CREM	CTBP1	CTBP2	CTCF	CTCFL	CUX1	DDX20	DEK	DPF2	E2F1	E2F4	E2F6	EBF1	EED	eGFP-ADNP	eGFP-AEBP2	eGFP-ATF1	eGFP-ATF2	eGFP-ATF3	eGFP-BACH1	eGFP-BCL11B	eGFP-CEBPB	eGFP-CEBPG	eGFP-CREB3	eGFP-CTCF	eGFP-CUX1	eGFP-DDX20	eGFP-DIDO1	eGFP-E2F4	eGFP-E2F5	eGFP-EGR2	eGFP-ELF1	eGFP-ELK1	eGFP-ETS2	eGFP-ETV1	eGFP-FEZF1	eGFP-FOS	eGFP-FOSL1	eGFP-FOSL2	eGFP-FOXJ2	eGFP-GABPA	eGFP-GATA2	eGFP-GFI1B	eGFP-GLI4	eGFP-GLIS1	eGFP-GLIS2	eGFP-GTF2A2	eGFP-GTF2E2	eGFP-HDAC8	eGFP-HINFP	eGFP-ID3	eGFP-ILK	eGFP-INSM2	eGFP-IRF1	eGFP-IRF9	eGFP-JUNB	eGFP-JUND	eGFP-KLF1	eGFP-KLF13	eGFP-KLF17	eGFP-KLF4	eGFP-KLF7	eGFP-KLF8	eGFP-KLF9	eGFP-MAFG	eGFP-MAZ	eGFP-MEF2D	eGFP-MYNN
A549					X				X				X												X											X																																																																
GM12878				X	X		X	X	X	X			X		X				X						X		X		X	X						X							X		X	X																																																						
HeLa-S3												X			X	X	X								X				X	X						X				X		X	X	X																																																								
HepG2	X				X								X		X					X					X	X				X			X			X																																																																
K562	X	X	X		X	X				X	X	X	X	X		X	X	X		X	X	X	X	X	X		X	X	X	X	X	X				X	X		X		X		X	X			X		X		X	X		X	X	X		X	X	X		X		X	X	X	X		X	X		X	X	X					X	X	X	X	X	X		X	X	X	X	X	X						X		X	
MCF-7																													X					X		X		X			X														X						X			X							X		X																				X			X				

	eGFP-NFE2	eGFP-NFE2L1	eGFP-NR2C2	eGFP-NR4A1	eGFP-OSR2	eGFP-OVOL3	eGFP-PATZ1	eGFP-PBX2	eGFP-POLR2H	eGFP-PRDM1	eGFP-PRDM10	eGFP-PRDM12	eGFP-PTRF	eGFP-PTTG1	eGFP-PYGO2	eGFP-RELA	eGFP-REST	eGFP-SP2	eGFP-SP3	eGFP-SP7	eGFP-TAF7	eGFP-TEAD2	eGFP-TFDP1	eGFP-TSC22D4	eGFP-TSHZ1	eGFP-USF2	eGFP-WT1	eGFP-ZBTB1	eGFP-ZBTB11	eGFP-ZBTB49	eGFP-ZBTB7A	eGFP-ZBTB8A	eGFP-ZEB1	eGFP-ZEB2	eGFP-ZFP3	eGFP-ZFP41	eGFP-ZFP64	eGFP-ZFP69B	eGFP-ZFX	eGFP-ZKSCAN8	eGFP-ZNF138	eGFP-ZNF140	eGFP-ZNF146	eGFP-ZNF16	eGFP-ZNF175	eGFP-ZNF18	eGFP-ZNF197	eGFP-ZNF202	eGFP-ZNF239	eGFP-ZNF24	eGFP-ZNF280D	eGFP-ZNF292	eGFP-ZNF324	eGFP-ZNF341	eGFP-ZNF354C	eGFP-ZNF391	eGFP-ZNF423	eGFP-ZNF48	eGFP-ZNF488	eGFP-ZNF512	eGFP-ZNF547	eGFP-ZNF558	eGFP-ZNF580	eGFP-ZNF584	eGFP-ZNF585B	eGFP-ZNF589	eGFP-ZNF600	eGFP-ZNF610	eGFP-ZNF623	eGFP-ZNF639	eGFP-ZNF644	eGFP-ZNF654	eGFP-ZNF664	eGFP-ZNF680	eGFP-ZNF692	eGFP-ZNF697	eGFP-ZNF707	eGFP-ZNF740	eGFP-ZNF76	eGFP-ZNF766	eGFP-ZNF781	eGFP-ZNF8	eGFP-ZNF83	eGFP-ZNF837	eGFP-ZSCAN16	eGFP-ZSCAN23	eGFP-ZSCAN5A	eGFP-ZXDB	EGR1	ELF1	ELK1	ELK4	EP300	ESRRA	ETS1	ETV4	ETV6	EZH2	FLAG-ATF1	FLAG-ATF4
A549																																																																																										X	X		X	X	X					
GM12878																																																																																									X	X	X		X		X		X	X		
HeLa-S3																																																																																											X	X	X					X		
HepG2																																																																																										X			X			X		X	X	X
K562	X	X	X	X				X	X				X	X	X	X					X	X	X	X		X			X										X	X					X		X			X										X				X		X				X	X							X		X			X						X	X	X		X	X	X		X	X	X	
MCF-7																																																																																											X			X						

	FLAG-CREB1	FLAG-DNMT3B	FLAG-HBP1	FLAG-HHEX	FLAG-HLF	FLAG-MBD1	FLAG-PBX2	FLAG-RAD21	FLAG-SSRP1	FLAG-TGIF2	FOS	FOSL1	FOSL2	FOXA1	FOXA2	FOXK2	FOXM1	FOXP2	GABPA	GATA1	GATA2	GATA3	GATA4	GTF2B	GTF2F1	GTF3C2	HA-E2F1	HCFC1	HDAC1	HDAC2	HDAC6	HDGF	HES1	HMBOX1	HMGN3	HNF1A	HNF4A	HNF4G	HSF1	IKZF1	IRF2	IRF3	IRF4	JUN	JUNB	JUND	KAT2B	KAT8	KDM1A	KDM4B	KDM5A	KDM5B	KLF16	L3MBTL2	LEF1	MAFF	MAFK	MAX	MAZ	MBD2	MBD4	MCM3	MCM5	MCM7	MEF2A	MEF2C	MIER1	MITF	MLLT1	MNT	MTA1	MTA2	MTA3	MXI1	MYB	MYBL2	MYC	MYNN	NANOG	NBN	NCOA1	NFATC1	NFE2	NFE2L2	NFIC	NFRKB	NFYA	NFYB	NONO	NR2C2	NR2F1	NR2F2	NR2F6	NRF1	PAX5	PBX3	PHF8	PKNOX1	PML	POLR2A
A549													X						X																												X											X	X																									X																X
GM12878											X						X		X									X				X								X		X	X		X	X											X	X	X						X	X			X			X	X	X	X		X			X		X	X		X		X	X		X				X	X	X			X	X
HeLa-S3											X								X						X	X	X															X		X		X										X	X	X	X															X			X							X			X	X		X				X						X
HepG2	X	X	X	X	X	X	X	X	X	X			X	X	X	X			X				X		X			X		X						X	X	X		X		X		X		X	X									X	X	X	X		X									X				X		X	X							X	X					X			X	X						X
K562							X				X	X				X			X	X	X			X	X	X			X	X	X	X	X	X	X					X	X			X	X	X		X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X		X	X	X			X		X			X	X		X	X		X			X	X	X		X	X	X	X	X			X	X	X	X
MCF-7								X								X						X			X		X	X				X							X																				X	X									X	X	X	X	X				X			X									X					X						X

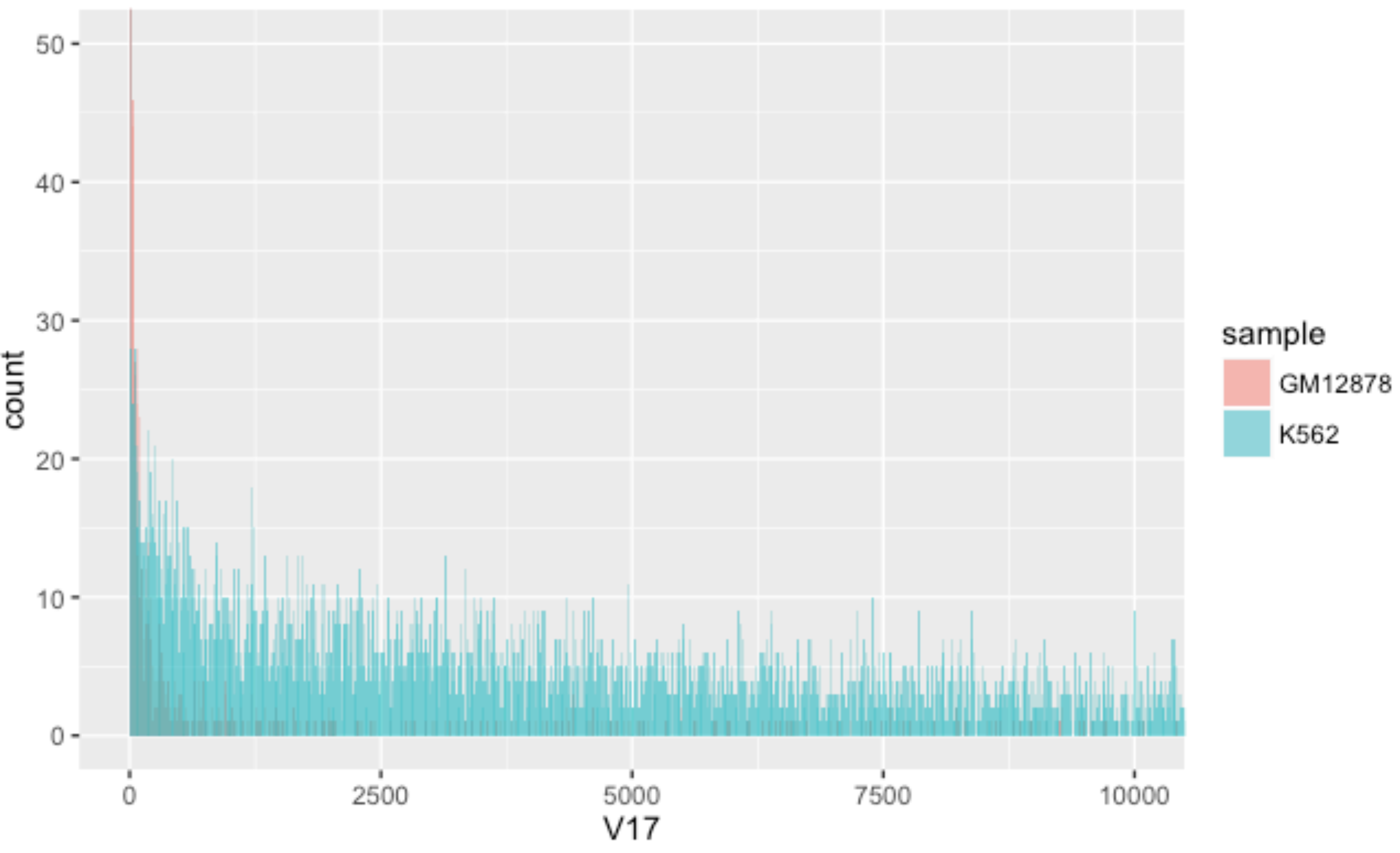
	POLR2AphosphoS2	POLR2AphosphoS5	POLR3A	POLR3G	POU2F2	POU5F1	PRDM1	RAD21	RAD51	RBBP5	RCOR1	REST	RFX1	RFX5	RNF2	RUNX1	RUNX3	RXRA	SAP30	SETDB1	SIN3A	SIN3B	SIRT6	SIX4	SIX5	SMAD2	SMAD5	SMARCA4	SMARCA5	SMARCB1	SMARCC1	SMARCC2	SMARCE1	SMC3	SOX13	SP1	SP2	SP4	SPI1	SREBF1	SREBF2	SRF	STAT1	STAT3	STAT5A	SUPT20H	SUPT5H	SUZ12	TAF1	TAF7	TAL1	TARDBP	TBL1XR1	TBP	TBX21	TCF12	TCF3	TCF7	TCF7L2	TEAD4	TFAP4	TFDP1	THAP1	TRIM22	TRIM24	TRIM28	UBTF	USF1	USF2	WRNIP1	YBX1	YBX3	YY1	ZBED1	ZBTB11	ZBTB33	ZBTB40	ZBTB7A	ZEB1	ZEB2	ZHX1	ZHX2	ZKSCAN1	ZMIZ1	ZMYM3	ZNF143	ZNF207	ZNF217	ZNF24	ZNF263	ZNF274	ZNF318	ZNF384	ZNF592	ZNF687	ZZZ3
A549	X							X				X									X				X															X	X								X							X												X					X			X																				
GM12878	X	X		X	X			X			X	X		X			X	X			X				X		X							X		X			X			X	X	X	X			X	X			X	X	X	X	X	X							X			X	X	X	X	X		X	X		X	X		X							X	X				X					X
HeLa-S3	X		X				X	X			X	X		X														X		X	X	X		X							X			X		X			X					X					X								X		X												X		X			X					X					X
HepG2	X	X						X	X		X	X		X	X			X			X	X												X	X	X	X					X						X	X					X		X		X	X	X	X							X	X		X		X			X	X	X				X	X		X	X	X				X		X			
K562	X	X	X	X				X	X	X	X	X	X	X	X	X			X	X	X		X		X	X	X	X	X	X			X	X		X	X		X	X		X			X		X	X	X	X	X	X	X	X				X	X	X		X	X		X	X	X	X	X		X	X	X	X	X	X	X	X		X	X		X	X	X	X			X	X	X	X				
MCF-7											X		X								X			X												X				X																			X												X				X		X						X				X	X						X	X	

- **For common 67 TFs between K562 and GM12878, 1,857,023 peaks identified**
- **In each TF peaks, 2.5 kb within TSS mapped to “proximal”, otherwise “distal”**
- **Overall, ~58% were proximal (compare to ENCODE-Net: ~40%)**

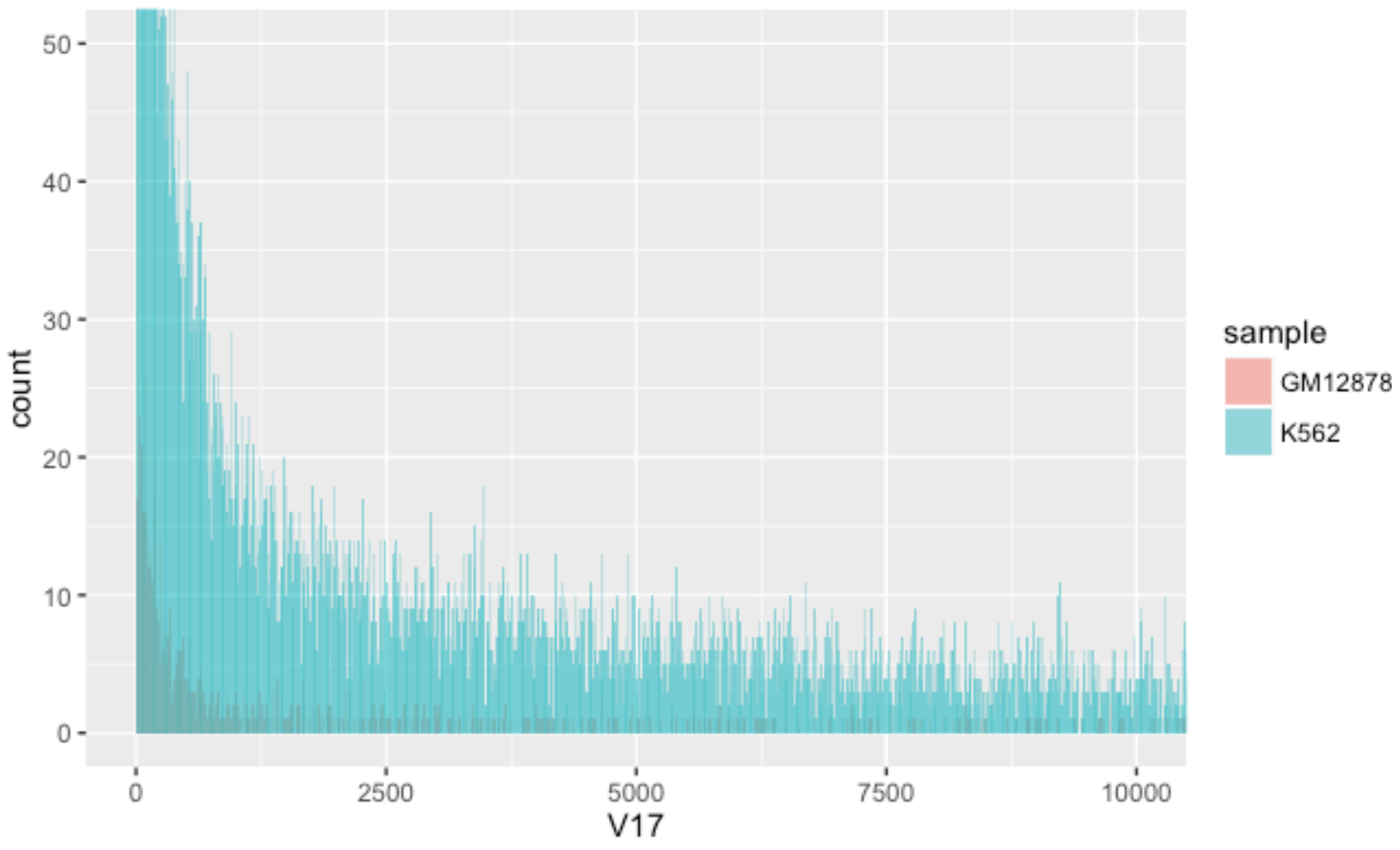


elevated enhancer activity in K562

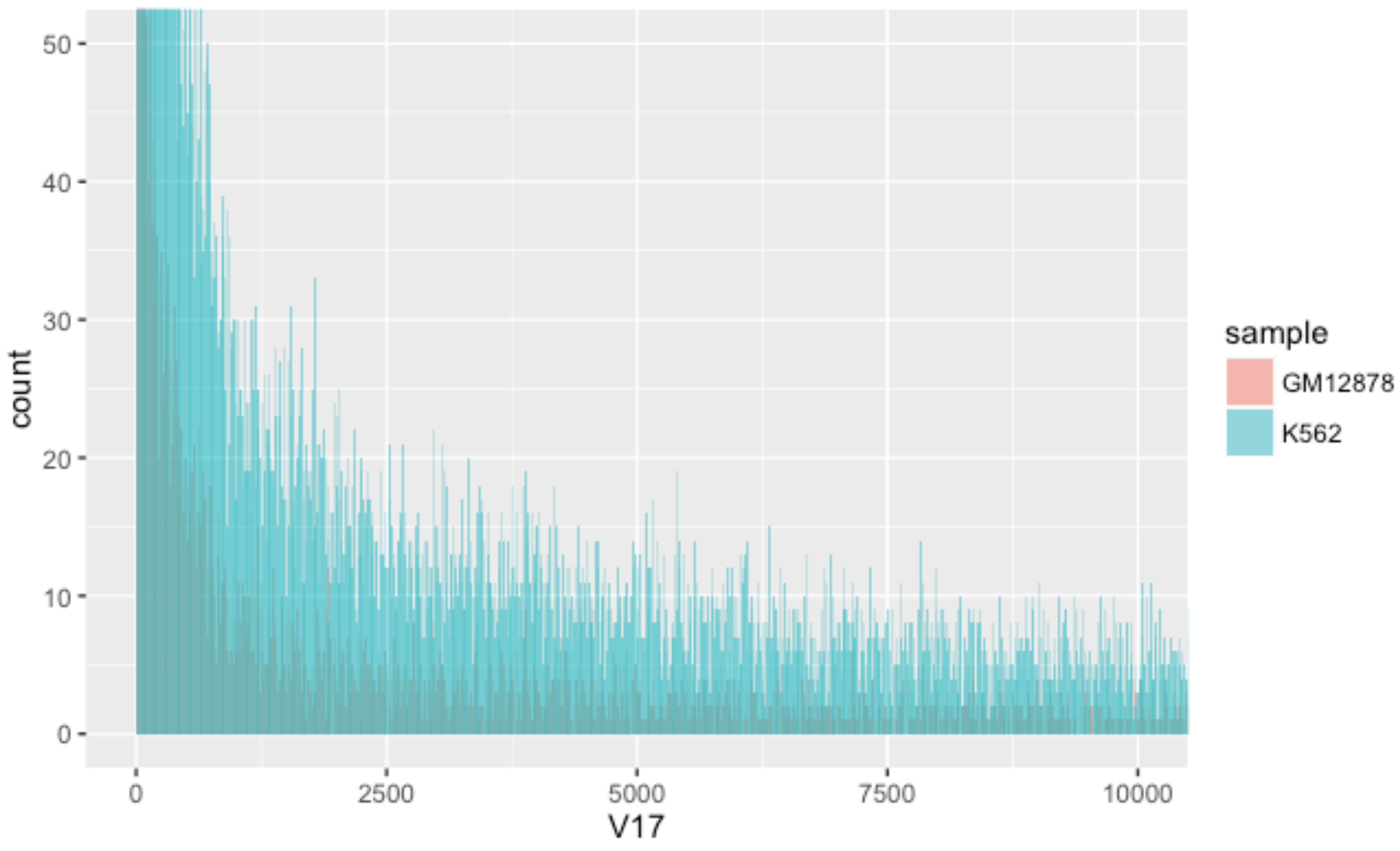
Distance to closest TSS in FOS



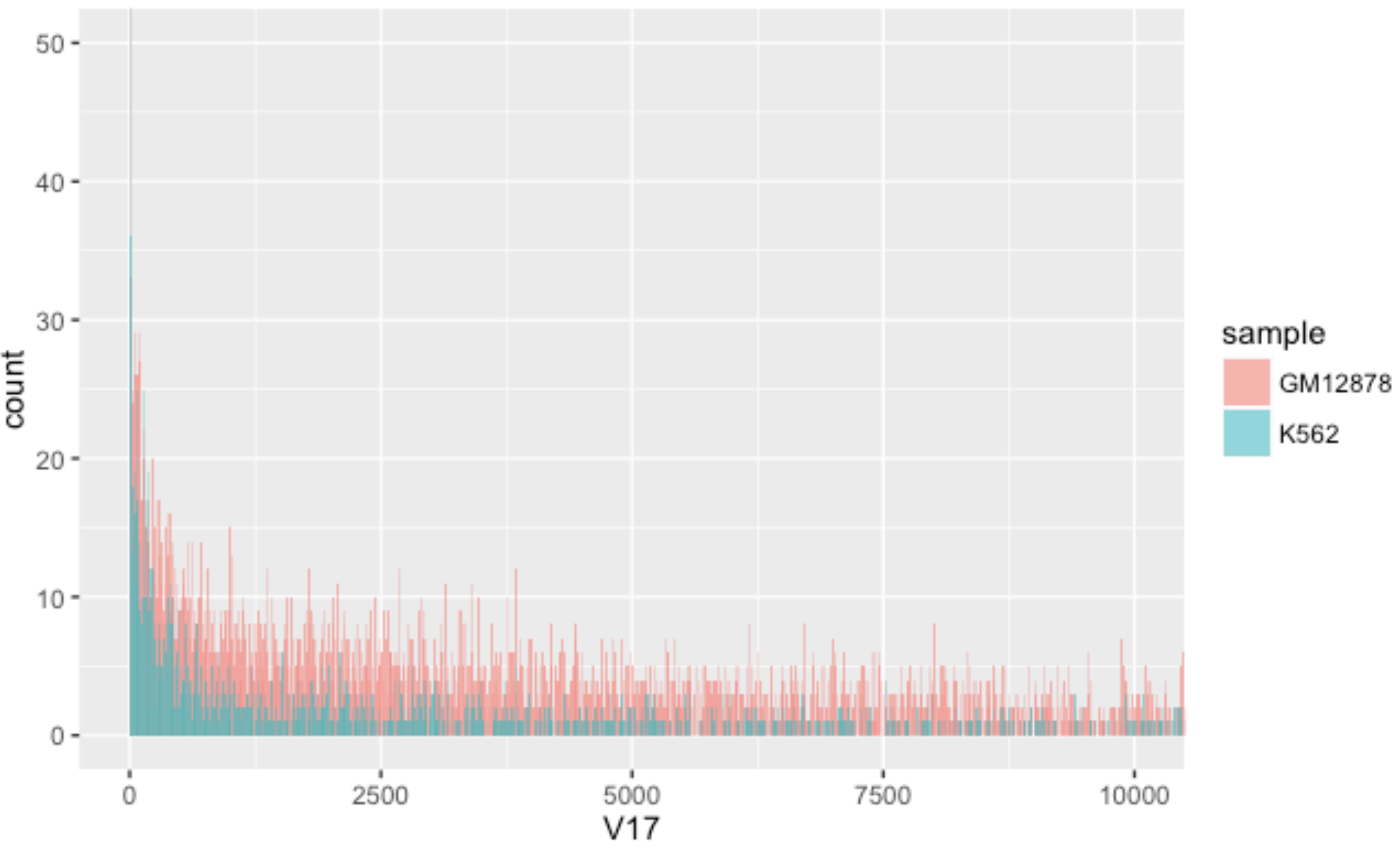
Distance to closest TSS in MYC



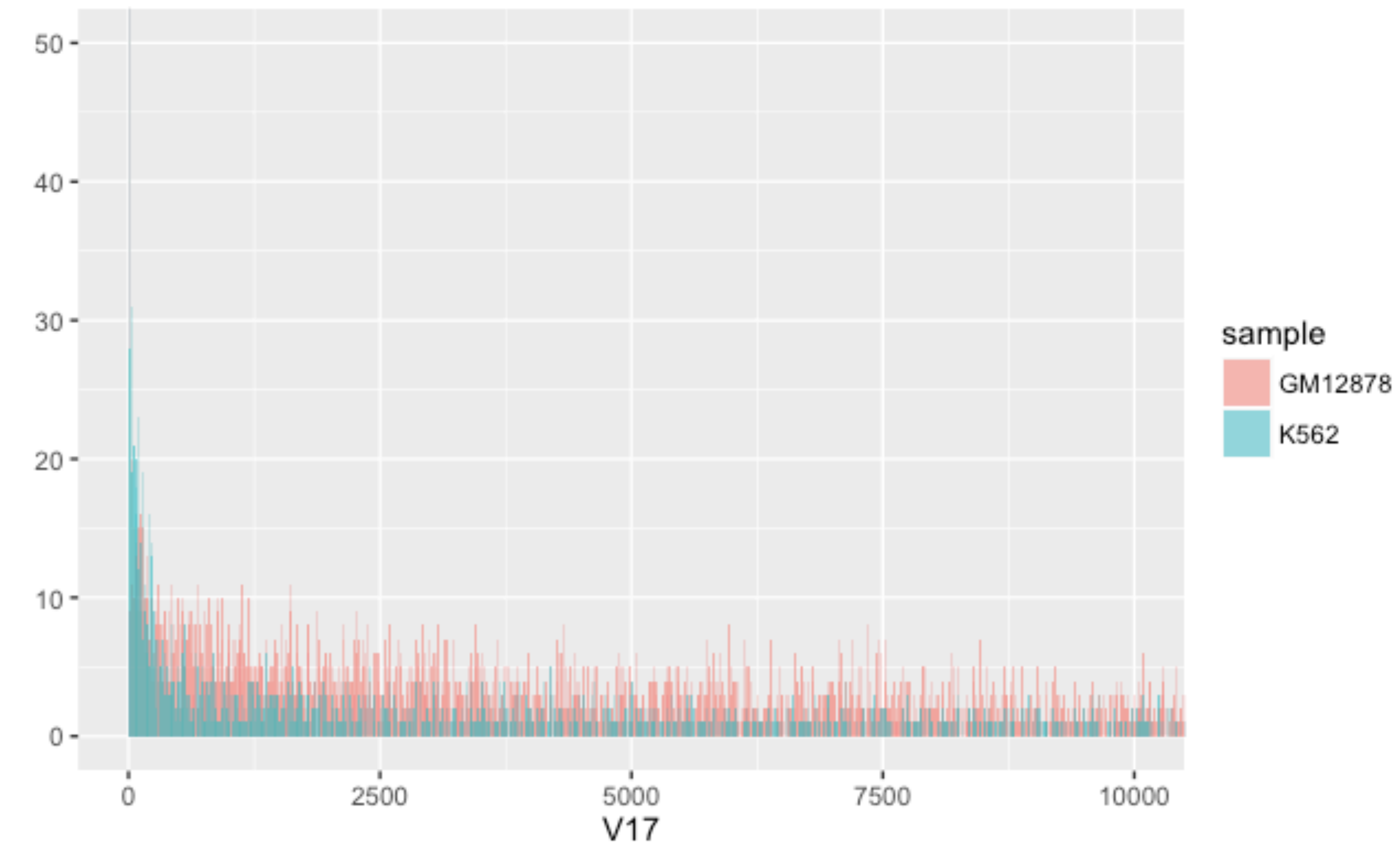
Distance to closest TSS in MAX



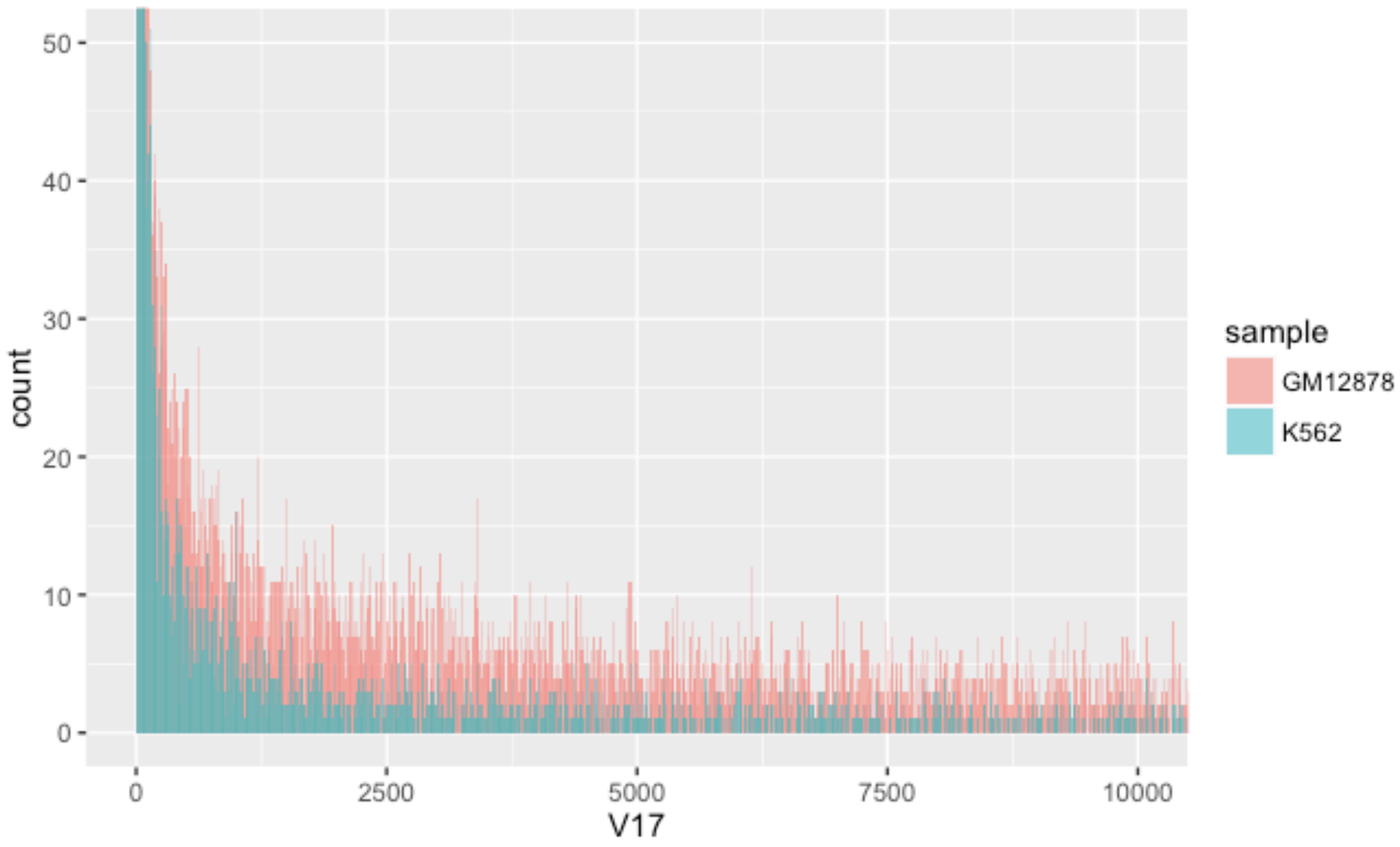
Distance to closest TSS in ZBED1



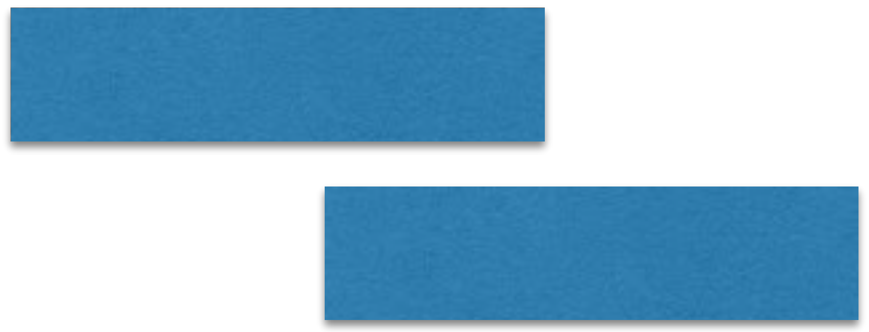
Distance to closest TSS in TCF7



Distance to closest TSS in SP1



elevated promoter activity in K562



269,855 K562_AH_ES (20%)
x
45,802 K562_ANS_MF (20%)
=
10,577 potential enhancers

167,221 GM12878_AH_ES
x
45,203 GM12878_ANS_MF (20%)
=
9,978 potential enhancers