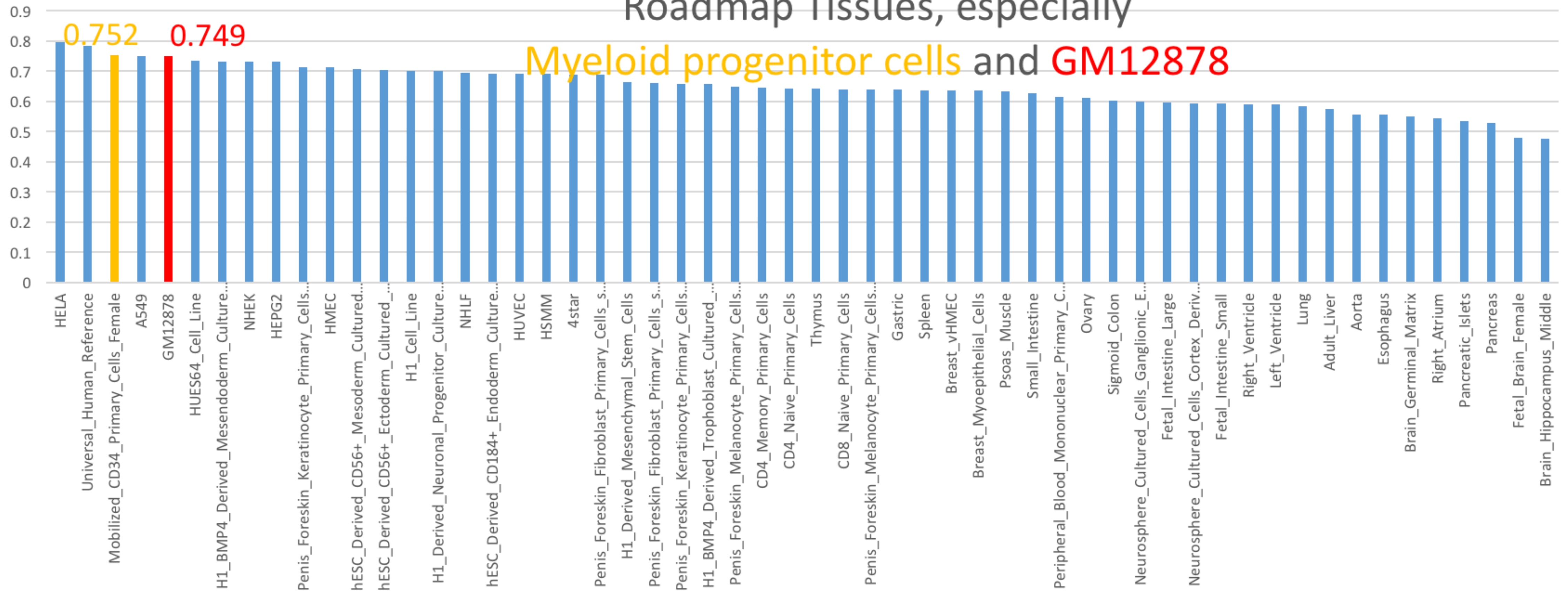


Comments	jen ID EIC	RDE	GROUP	COLOR	Epigenome Mnemonic	ndi Sec	jal stir	Autc Use Train (Core)	Mi Us Tr (C)	Tra Core + K27ac	Standardized Epigenome name	Epigenome name (from EDACC Release 9 directory)	ANATOMY
								94	60	40			
Outlier DNA m	E016	7	ESC	#924965	ESC.HUES64	1	1	1	1	1	HUES64 Cells	HUES64_Cell_Line	ESC
	E003	8	ESC	#924965	ESC.H1	1	1	1	1	1	H1 Cells	H1_Cell_Line	ESC
	E024	9	ESC	#924965	ESC.4STAR	1	1	1	0	0	ES-UCSF4 Cells	4star	ESC
	E007	15	ES-deriv	#4178AE	ESDR.H1.NEUR.PROG	1	0	1	0	0	H1 Derived Neuronal Progenitor Cultured Cells	H1_Derived_Neuronal_Progenitor_Cultured_Cells	ESC_DERIVED
	E013	18	ES-deriv	#4178AE	ESDR.CD56.MESO	-1	-1	0	0	0	hESC Derived CD56+ Mesoderm Cultured Cells	hESC_Derived_CD56+_Mesoderm_Cultured_Cells	ESC_DERIVED
	E012	19	ES-deriv	#4178AE	ESDR.CD56.ECTO	-1	0	0	0	0	hESC Derived CD56+ Ectoderm Cultured Cells	hESC_Derived_CD56+_Ectoderm_Cultured_Cells	ESC_DERIVED
	E011	20	ES-deriv	#4178AE	ESDR.CD184.ENDO	1	0	1	1	1	hESC Derived CD184+ Endoderm Cultured Cells	hESC_Derived_CD184+_Endoderm_Cultured_Cells	ESC_DERIVED
	E004	21	ES-deriv	#4178AE	ESDR.H1.BMP4.MESO	1	0	1	0	0	H1 BMP4 Derived Mesendoderm Cultured Cells	H1_BMP4_Derived_Mesendoderm_Cultured_Cells	ESC_DERIVED
	E005	22	ES-deriv	#4178AE	ESDR.H1.BMP4.TROP	1	1	1	1	1	H1 BMP4 Derived Trophoblast Cultured Cells	H1_BMP4_Derived_Trophoblast_Cultured_Cells	ESC_DERIVED
	E006	23	ES-deriv	#4178AE	ESDR.H1.MSC	1	1	1	1	1	H1 Derived Mesenchymal Stem Cells	H1_Derived_Mesenchymal_Stem_Cells	ESC_DERIVED
	E062	24	Blood & T-cell	#55A354	BLD.PER.MONUC.PC	1	0	1	1	0	Primary mononuclear cells from peripheral blood	Peripheral_Blood_Mononuclear_Primary_Cells	BLOOD
	E037	34	Blood & T-cell	#55A354	BLD.CD4.MPC	1	0	1	0	0	Primary T helper memory cells from peripheral blood 2	CD4_Memory_Primary_Cells	BLOOD
	E038	36	Blood & T-cell	#55A354	BLD.CD4.NPC	1	0	1	0	0	Primary T helper naive cells from peripheral blood	CD4_Naive_Primary_Cells	BLOOD
	E047	37	Blood & T-cell	#55A354	BLD.CD8.NPC	1	0	1	0	0	Primary T CD8+ naive cells from peripheral blood	CD8_Naive_Primary_Cells	BLOOD
	E050	42	HSC & B-cell	#678C69	BLD.MOB.CD34.PC.F	1	0	1	0	0	Primary hematopoietic stem cells G-CSF-mobilized Female	Mobilized_CD34_Primary_Cells_Female	BLOOD
	E055	52	Epithelial	#FF9D0C	SKIN.PEN.FRSK.FIB.01	1	1	1	1	1	Foreskin Fibroblast Primary Cells skin01	Penis_Foreskin_Fibroblast_Primary_Cells_skin01	SKIN
	E056	53	Epithelial	#FF9D0C	SKIN.PEN.FRSK.FIB.02	1	0	1	0	0	Foreskin Fibroblast Primary Cells skin02	Penis_Foreskin_Fibroblast_Primary_Cells_skin02	SKIN
	E059	54	Epithelial	#FF9D0C	SKIN.PEN.FRSK.MEL.01	1	0	1	0	0	Foreskin Melanocyte Primary Cells skin01	Penis_Foreskin_Melanocyte_Primary_Cells_skin01	SKIN
	E061	55	Epithelial	#FF9D0C	SKIN.PEN.FRSK.MEL.03	1	1	1	1	1	Foreskin Melanocyte Primary Cells skin03	Penis_Foreskin_Melanocyte_Primary_Cells_skin03	SKIN
	E057	56	Epithelial	#FF9D0C	SKIN.PEN.FRSK.KER.02	-1	1	0	0	0	Foreskin Keratinocyte Primary Cells skin02	Penis_Foreskin_Keratinocyte_Primary_Cells_skin02	SKIN
	E058	57	Epithelial	#FF9D0C	SKIN.PEN.FRSK.KER.03	1	1	1	1	1	Foreskin Keratinocyte Primary Cells skin03	Penis_Foreskin_Keratinocyte_Primary_Cells_skin03	SKIN
	E028	58	Epithelial	#FF9D0C	BRST.HMEC.35	-1	1	0	0	0	Breast variant Human Mammary Epithelial Cells (vHMEC)	Breast_vHMEC	BREAST
Bad SBS DNA	E027	59	Epithelial	#FF9D0C	BRST.MYO	1	1	1	1	0	Breast Myoepithelial Primary Cells	Breast_Myoepithelial_Cells	BREAST
	E054	60	Neurosph	#FFD924	BRN.GANGEM.DR.NRSPHR	1	0	1	1	0	Ganglion Eminence derived primary cultured neurospheres	Neurosphere_Cultured_Cells_Ganglionic_Eminence_Derived	BRAIN
	E053	61	Neurosph	#FFD924	BRN.CRTX.DR.NRSPHR	-1	0	0	0	0	Cortex derived primary cultured neurospheres	Neurosphere_Cultured_Cells_Cortex_Derived	BRAIN
	E112	62	Thymus	#DAB92E	THYM	0	1	1	0	0	Thymus	Thymus	THYMUS
	E071	64	Brain	#C5912B	BRN.HIPP.MID	1	0	1	1	1	Brain Hippocampus Middle	Brain_Hippocampus_Middle	BRAIN
	E070	71	Brain	#C5912B	BRN.GRM.MTRX	-1	0	0	0	0	Brain Germinal Matrix	Brain_Germinal_Matrix	BRAIN
	E082	72	Brain	#C5912B	BRN.FET.F	1	-1	0	0	0	Fetal Brain Female	Fetal_Brain_Female	BRAIN
	E100	75	Muscle	#C2655D	MUS.PSOAS	-1	1	0	0	0	Psoas Muscle	Psoas_Muscle	MUSCLE
Likely antibody	E104	81	Heart	#D56F80	HRT.ATR.R	-1	1	0	0	0	Right Atrium	Right_Atrium	HEART
	E095	82	Heart	#D56F80	HRT.VENT.L	1	1	1	0	0	Left Ventricle	Left_Ventricle	HEART
	E105	83	Heart	#D56F80	HRT.VNT.R	-1	1	0	0	0	Right Ventricle	Right_Ventricle	HEART
	E065	84	Heart	#D56F80	VAS.AOR	1	1	1	0	0	Aorta	Aorta	VASCULAR
	E085	90	Digestive	#C58DAA	GI.S.INT.FET	0	1	1	1	1	Fetal Intestine Small	Fetal_Intestine_Small	GI_INTESTINE
	E084	91	Digestive	#C58DAA	GI.L.INT.FET	0	1	1	0	0	Fetal Intestine Large	Fetal_Intestine_Large	GI_INTESTINE
	E109	92	Digestive	#C58DAA	GI.S.INT	-1	1	0	0	0	Small Intestine	Small_Intestine	GI_INTESTINE
	E106	93	Digestive	#C58DAA	GI.CLN.SIG	1	1	1	0	0	Sigmoid Colon	Sigmoid_Colon	GI_COLON
	E079	99	Digestive	#C58DAA	GI.ESO	-1	1	0	0	0	Esophagus	Esophagus	GI_ESOPHAGUS
	E094	100	Digestive	#C58DAA	GI.STMC.GAST	-1	1	0	0	0	Gastric	Gastric	GI_STOMACH
	E097	104	Other	#999999	OVRV	1	1	1	0	0	Ovary	Ovary	OVARY
	E087	105	Other	#999999	PANC.ISLT	-1	1	0	0	0	Pancreatic Islets	Pancreatic_Islets	PANCREAS
	E066	108	Other	#999999	LIV.ADLT	1	1	1	1	1	Liver	Adult_Liver	LIVER
Has very weak	E098	109	Other	#999999	PANC	-1	-1	0	0	0	Pancreas	Pancreas	PANCREAS
	E096	110	Other	#999999	LNG	-1	1	0	0	0	Lung	Lung	LUNG
Has very weak	E113	111	Other	#999999	SPLN	-1	-1	0	0	0	Spleen	Spleen	SPLEEN
	E114	112	ENCODE2012	#000000	LNG.A549.ETOH002.CNCR	1	-1	0	0	0	A549 EtOH 0.02pct Lung Carcinoma Cell Line	A549_EtOH_0.02pct_Lung_Carcinoma	LUNG
	E116	114	ENCODE2012	#000000	BLD.GM12878	1	0	1	0	0	GM12878 Lymphoblastoid Cells	GM12878_Lymphoblastoid	BLOOD
	E117	115	ENCODE2012	#000000	CRVX.HELAS3.CNCR	1	0	1	0	0	HeLa-S3 Cervical Carcinoma Cell Line	HeLa-S3_Cervical_Carcinoma	CERVIX
	E118	116	ENCODE2012	#000000	LIV.HEPG2.CNCR	0	1	1	1	1	HepG2 Hepatocellular Carcinoma Cell Line	HepG2_Hepatocellular_Carcinoma	LIVER
	E119	117	ENCODE2012	#000000	BRST.HMEC	0	1	1	1	1	HMEC Mammary Epithelial Primary Cells	HMEC_Mammary_Epithelial	BREAST
	E120	118	ENCODE2012	#000000	MUS.HSMM	0	1	1	1	1	HSMM Skeletal Muscle Myoblasts Cells	HSMM_Skeletal_Muscle_Myoblasts	MUSCLE
	E122	120	ENCODE2012	#000000	VAS.HUVEC	1	0	1	0	0	HUVEC Umbilical Vein Endothelial Primary Cells	HUVEC_Umbilical_Vein_Endothelial_Cells	VASCULAR
	E123	121	ENCODE2012	#000000	BLD.K562.CNCR	0	1	1	1	1	K562 Leukemia Cells	K562_Leukemia	BLOOD
	E127	125	ENCODE2012	#000000	SKIN.NHEK	0	1	1	1	1	NHEK-Epidermal Keratinocyte Primary Cells	NHEK-Epidermal_Keratinocytes	SKIN
	E128	126	ENCODE2012	#000000	LNG.NHLF	0	1	1	1	1	NHLF Lung Fibroblast Primary Cells	NHLF_Lung_Fibroblasts	LUNG

The healthy cell-type most relevantly similar to K562 is its cell of origin: the myeloid progenitor cell. GM12878 is approximately as similar to K562 as is the myeloid progenitor cell.

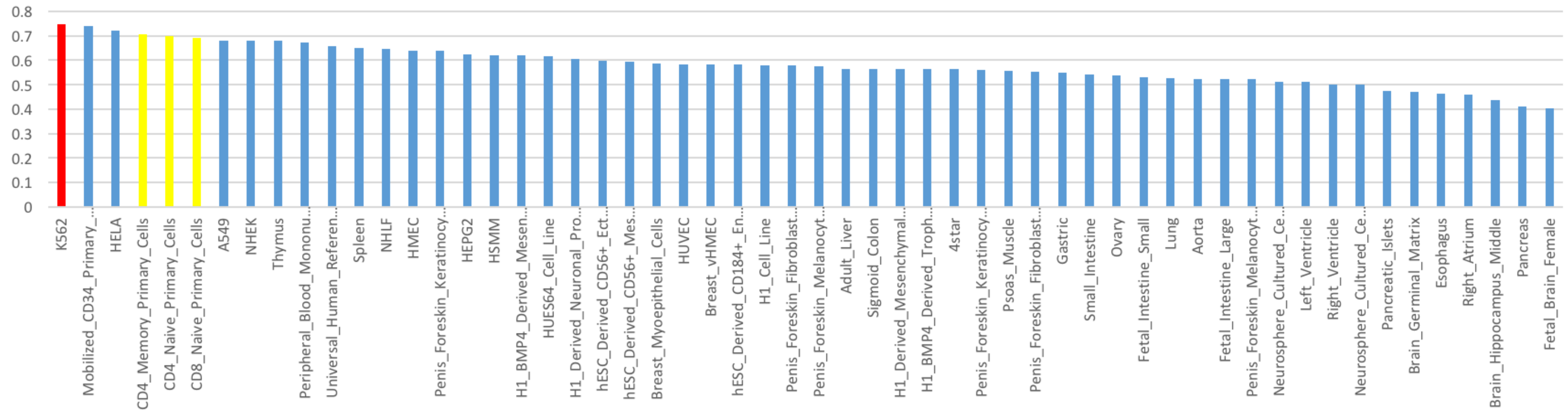
Spearman correlation of TF expression between K562 and other Roadmap Tissues, especially

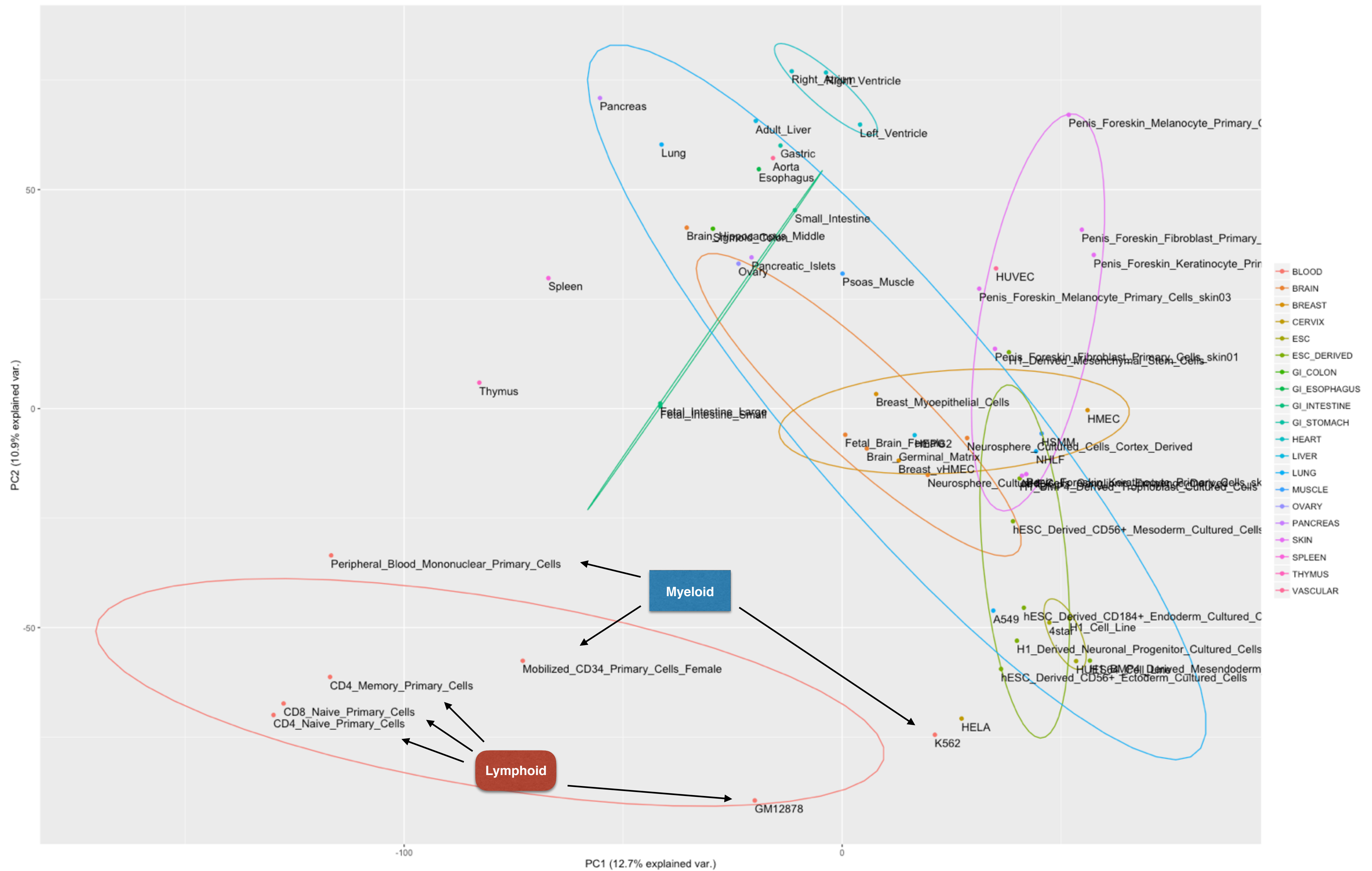
Myeloid progenitor cells and GM12878



The Roadmap cell-type with the closest TF expression to G12878 is K562 – even closer than other cells in G12878’s lineage. (with the caveat that the cell of origin of G12878 –B-cells- was not included in Roadmap)

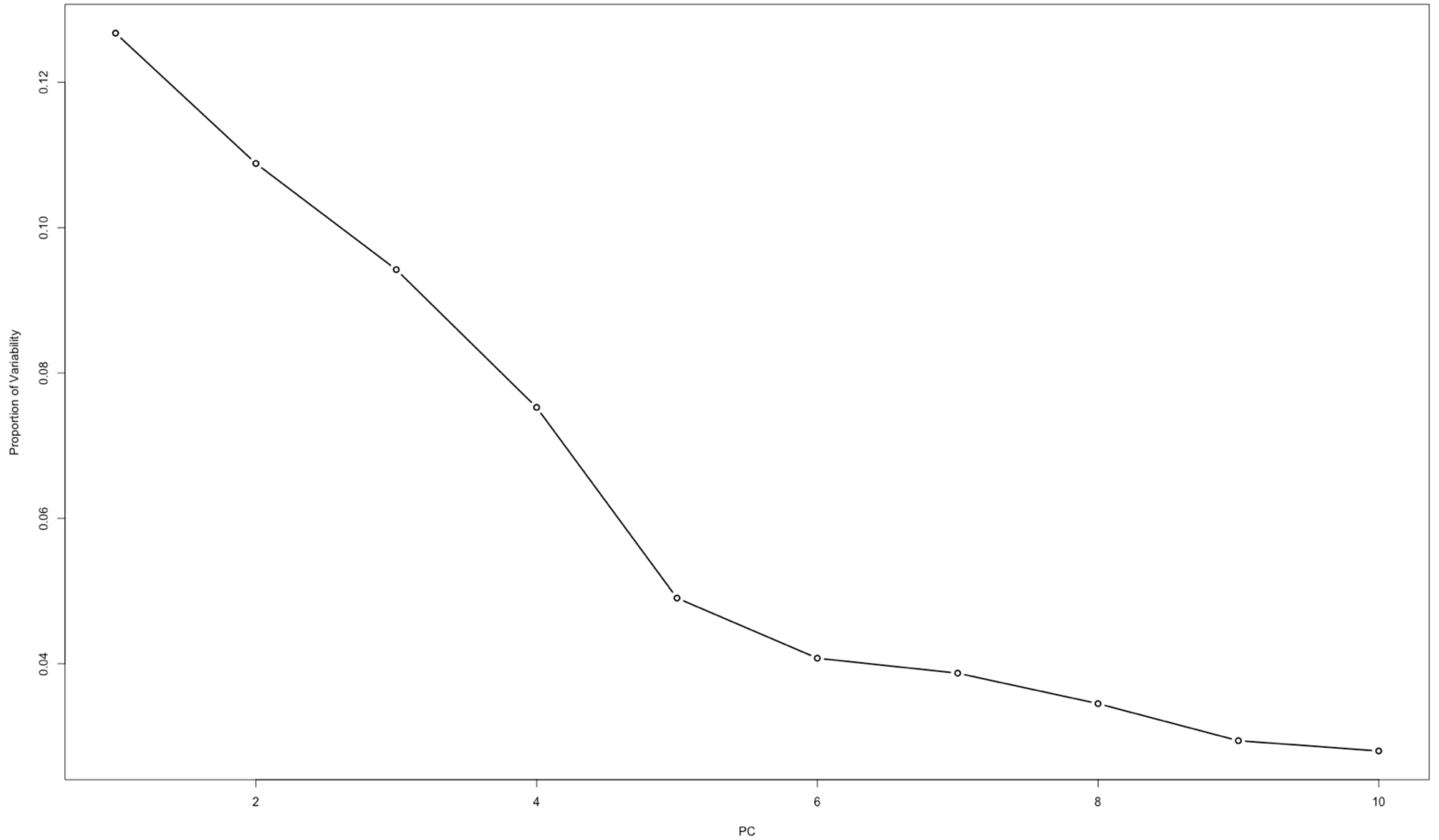
Spearman correlation of TF expression between G12878 and other Roadmap Tissues, especially **K562 cells** and **lymphoid lineage cells**.





DL

Scree Plot



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