

Figure 1: A plot showing the distribution of genes across the gene list index. The x-axis is 'Gene List Index' (0 to 17824) and the y-axis is 'Number of genes' (0 to 17824). A blue line represents the cumulative distribution function (CDF) of genes. A green vertical line marks the 'Zero crossing at 9077'. A red vertical line marks the 'Peak at 14345'. The area under the CDF is shaded green, with the region to the left of the zero crossing labeled 'clus1' and the region to the right labeled 'NON.clus1'.

A density plot showing the distribution of ES values. The x-axis is labeled 'ES' and ranges from -1.0 to 1.0. The y-axis is labeled 'P(ES)' and ranges from 0.0 to 1.5. A red curve represents the 'Gene Set Null Density', which is bimodal with peaks at approximately -0.6 and 0.6. A vertical black line represents the 'Observed Gene Set ES value' at approximately -0.587. The area to the left of this line is labeled 'Neg. ES "NON.clus1"' and the area to the right is labeled 'Pos. ES: "clus1"'. Below the x-axis, the following text is displayed: 'ES = -0.587 NES = -1.21 Nom. p-val= 0.311 FWER= 0.992 FDR= 1'.

Heatmap visualization showing gene expression profiles across 48 samples, clustered into two groups: **clus1** (red bar) and **NON.clus1** (blue bar). The y-axis lists 30 genes. The color scale ranges from -2 (blue) to 2 (red).

Genes (Y-axis): Class, CD40, RFXAP, RAG2, RFXANK, IKBKG, CD4, TNFRSF13C, BLNK, CIITA, UNG, PTPRC, RFX5, TAP2, CD8B, TAP1, JAK3, DCLRE1C, ADA, ZAP70, CD3E, CD79A, LCK, IL2RG, CD3D, ICOS, TNFRSF13B, BTK, CD40LG, CD19, IL7R, AICDA, RAG1.

Samples (X-axis): TCGA_A1_5322_01, TCGA_A1_5327_01, TCGA_A1_5334_01, TCGA_A1_5338_01, TCGA_A1_5342_01, TCGA_A1_5345_01, TCGA_A1_5346_01, TCGA_A1_5347_01, TCGA_A1_5348_01, TCGA_A1_5349_01, TCGA_A1_5350_01, TCGA_A1_5351_01, TCGA_A1_5352_01, TCGA_A1_5353_01, TCGA_A1_5354_01, TCGA_A1_5355_01, TCGA_A1_5356_01, TCGA_A1_5357_01, TCGA_A1_5358_01, TCGA_A1_5359_01, TCGA_A1_5360_01, TCGA_A1_5361_01, TCGA_A1_5362_01, TCGA_A1_5363_01, TCGA_A1_5364_01, TCGA_A1_5365_01, TCGA_A1_5366_01, TCGA_A1_5367_01, TCGA_A1_5368_01, TCGA_A1_5369_01, TCGA_A1_5370_01, TCGA_A1_5371_01, TCGA_A1_5372_01, TCGA_A1_5373_01, TCGA_A1_5374_01, TCGA_A1_5375_01, TCGA_A1_5376_01, TCGA_A1_5377_01, TCGA_A1_5378_01, TCGA_A1_5379_01, TCGA_A1_5380_01, TCGA_A1_5381_01, TCGA_A1_5382_01, TCGA_A1_5383_01, TCGA_A1_5384_01, TCGA_A1_5385_01, TCGA_A1_5386_01, TCGA_A1_5387_01, TCGA_A1_5388_01, TCGA_A1_5389_01, TCGA_A1_5390_01, TCGA_A1_5391_01, TCGA_A1_5392_01, TCGA_A1_5393_01, TCGA_A1_5394_01, TCGA_A1_5395_01, TCGA_A1_5396_01, TCGA_A1_5397_01, TCGA_A1_5398_01, TCGA_A1_5399_01, TCGA_A1_5400_01, TCGA_A1_5401_01, TCGA_A1_5402_01, TCGA_A1_5403_01, TCGA_A1_5404_01, TCGA_A1_5405_01, TCGA_A1_5406_01, TCGA_A1_5407_01, TCGA_A1_5408_01, TCGA_A1_5409_01, TCGA_A1_5410_01, TCGA_A1_5411_01, TCGA_A1_5412_01, TCGA_A1_5413_01, TCGA_A1_5414_01, TCGA_A1_5415_01, TCGA_A1_5416_01, TCGA_A1_5417_01, TCGA_A1_5418_01, TCGA_A1_5419_01, TCGA_A1_5420_01, TCGA_A1_5421_01, TCGA_A1_5422_01, TCGA_A1_5423_01, TCGA_A1_5424_01, TCGA_A1_5425_01, TCGA_A1_5426_01, TCGA_A1_5427_01, TCGA_A1_5428_01, TCGA_A1_5429_01, TCGA_A1_5430_01, TCGA_A1_5431_01, TCGA_A1_5432_01, TCGA_A1_5433_01, TCGA_A1_5434_01, TCGA_A1_5435_01, TCGA_A1_5436_01, TCGA_A1_5437_01, TCGA_A1_5438_01, TCGA_A1_5439_01, TCGA_A1_5440_01, TCGA_A1_5441_01, TCGA_A1_5442_01, TCGA_A1_5443_01, TCGA_A1_5444_01, TCGA_A1_5445_01, TCGA_A1_5446_01, TCGA_A1_5447_01, TCGA_A1_5448_01, TCGA_A1_5449_01, TCGA_A1_5450_01, TCGA_A1_5451_01, TCGA_A1_5452_01, TCGA_A1_5453_01, TCGA_A1_5454_01, TCGA_A1_5455_01, TCGA_A1_5456_01, TCGA_A1_5457_01, TCGA_A1_5458_01, TCGA_A1_5459_01, TCGA_A1_5460_01, TCGA_A1_5461_01, TCGA_A1_5462_01, TCGA_A1_5463_01, TCGA_A1_5464_01, TCGA_A1_5465_01, TCGA_A1_5466_01, TCGA_A1_5467_01, TCGA_A1_5468_01, TCGA_A1_5469_01, TCGA_A1_5470_01, TCGA_A1_5471_01, TCGA_A1_5472_01, TCGA_A1_5473_01, TCGA_A1_5474_01, TCGA_A1_5475_01, TCGA_A1_5476_01, TCGA_A1_5477_01, TCGA_A1_5478_01, TCGA_A1_5479_01, TCGA_A1_5480_01, TCGA_A1_5481_01, TCGA_A1_5482_01, TCGA_A1_5483_01, TCGA_A1_5484_01, TCGA_A1_5485_01, TCGA_A1_5486_01, TCGA_A1_5487_01, TCGA_A1_5488_01, TCGA_A1_5489_01, TCGA_A1_5490_01, TCGA_A1_5491_01, TCGA_A1_5492_01, TCGA_A1_5493_01, TCGA_A1_5494_01, TCGA_A1_5495_01, TCGA_A1_5496_01, TCGA_A1_5497_01, TCGA_A1_5498_01, TCGA_A1_5499_01, TCGA_A1_5500_01, TCGA_A1_5501_01, TCGA_A1_5502_01, TCGA_A1_5503_01, TCGA_A1_5504_01, TCGA_A1_5505_01, TCGA_A1_5506_01, TCGA_A1_5507_01, TCGA_A1_5508_01, TCGA_A1_5509_01, TCGA_A1_5510_01, TCGA_A1_5511_01, TCGA_A1_5512_01, TCGA_A1_5513_01, TCGA_A1_5514_01, TCGA_A1_5515_01, TCGA_A1_5516_01, TCGA_A1_5517_01, TCGA_A1_5518_01, TCGA_A1_5519_01, TCGA_A1_5520_01, TCGA_A1_5521_01, TCGA_A1_5522_01, TCGA_A1_5523_01, TCGA_A1_5524_01, TCGA_A1_5525_01, TCGA_A1_5526_01, TCGA_A1_5527_01, TCGA_A1_5528_01, TCGA_A1_5529_01, TCGA_A1_5530_01, TCGA_A1_5531_01, TCGA_A1_5532_01, TCGA_A1_5533_01, TCGA_A1_5534_01, TCGA_A1_5535_01, TCGA_A1_5536_01, TCGA_A1_5537_01, TCGA_A1_5538_01, TCGA_A1_5539_01, TCGA_A1_5540_01, TCGA_A1_5541_01, TCGA_A1_5542_01, TCGA_A1_5543_01, TCGA_A1_5544_01, TCGA_A1_5545_01, TCGA_A1_5546_01, TCGA_A1_5547_01, TCGA_A1_5548_01, TCGA_A1_5549_01, TCGA_A1_5550_01, TCGA_A1_5551_01, TCGA_A1_5552_01, TCGA_A1_5553_01, TCGA_A1_5554_01, TCGA_A1_5555_01, TCGA_A1_5556_01, TCGA_A1_5557_01, TCGA_A1_5558_01, TCGA_A1_5559_01, TCGA_A1_5560_01, TCGA_A1_5561_01, TCGA_A1_5562_01, TCGA_A1_5563_01, TCGA_A1_5564_01, TCGA_A1_5565_01, TCGA_A1_5566_01, TCGA_A1_5567_01, TCGA_A1_5568_01, TCGA_A1_5569_01, TCGA_A1_5570_01, TCGA_A1_5571_01, TCGA_A1_5572_01, TCGA_A1_5573_01, TCGA_A1_5574_01, TCGA_A1_5575_01, TCGA_A1_5576_01, TCGA_A1_5577_01, TCGA_A1_5578_01, TCGA_A1_5579_01, TCGA_A1_5580_01, TCGA_A1_5581_01, TCGA_A1_5582_01, TCGA_A1_5583_01, TCGA_A1_5584_01, TCGA_A1_5585_01, TCGA_A1_5586_01, TCGA_A1_5587_01, TCGA_A1_5588_01, TCGA_A1_5589_01, TCGA_A1_5590_01, TCGA_A1_5591_01, TCGA_A1_5592_01, TCGA_A1_5593_01, TCGA_A1_5594_01, TCGA_A1_5595_01, TCGA_A1_5596_01, TCGA_A1_5597_01, TCGA_A1_5598_01, TCGA_A1_5599_01, TCGA_A1_5600_01, TCGA_A1_5601_01, TCGA_A1_5602_01, TCGA_A1_5603_01, TCGA_A1_5604_01, TCGA_A1_5605_01, TCGA_A1_5606_01, TCGA_A1_5607_01, TCGA_A1_5608_01, TCGA_A1_5609_01, TCGA_A1_5610_01, TCGA_A