Chr: 1:0:122026459 Log likelihood -4337.7 9 9.0 Expression z-score 4 Density 0.4 $^{\circ}$ 0.2 0 0.0 7 -2 2 3 0 20 40 0 4 60 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 4000 4000 3000 3000 Frequency Frequency 1000 2000 2000 1000 0 0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.6 8.0 0.0 0.4 1.0 Posterior probability Posterior probability

Chr: 1:124932724:248956422 Log likelihood -6157.6 9.4 9 Expression z-score 0.3 4 Density α 0.2 0 0.1 7 0.0 -4 -2 0 2 0 20 40 80 4 60 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 4000 1000 2000 3000 4000 3000 Frequency Frequency 2000 1000 0 0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.4 0.6 8.0 0.0 1.0 Posterior probability Posterior probability

Chr: 2:0:92188145 Log likelihood -6164.9 9 0.30 Expression z-score 4 0.20 α 0 0.10 7 4 0.00 တု -6 -2 0 2 0 20 40 80 4 60 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 1000 1000 Frequency Frequency 009 009 200 200 0 0 0.0 0.2 0.4 0.6 8.0 0.0 0.2 0.6 8.0 1.0 0.4 1.0 Posterior probability Posterior probability

Chr: 2:94090557:242193529 Log likelihood -6164.8 0.4 9 0.3 Expression z-score 4 Density α 0.2 0 0.1 7 4 0.0 -4 -2 2 0 20 40 60 80 0 4 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 800 800 Frequency Frequency 200 400 600 900 400 200 0 0 0.2 0.6 8.0 0.0 0.2 8.0 0.0 0.4 1.0 0.4 0.6 1.0 Posterior probability Posterior probability

Chr: 3:0:90772458 Log likelihood -6163.5 9 Expression z-score 4 $^{\circ}$ 0 7 4 -2 0 2 0 20 40 -4 4 60 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 Frequency 009 200 0 0.0 0.2 0.6 8.0 0.0 0.2 0.6 8.0 0.4 1.0 0.4 1.0

Posterior probability

9.7

0.3

0.2

0.1

0.0

1000

009

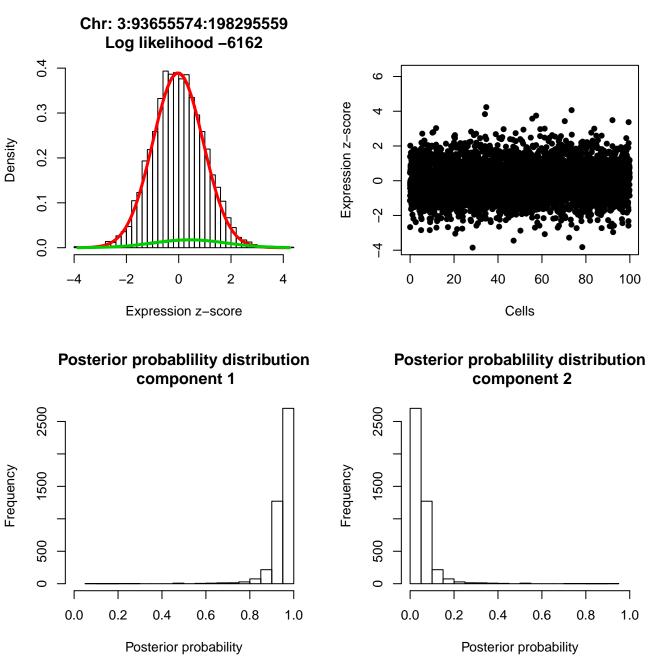
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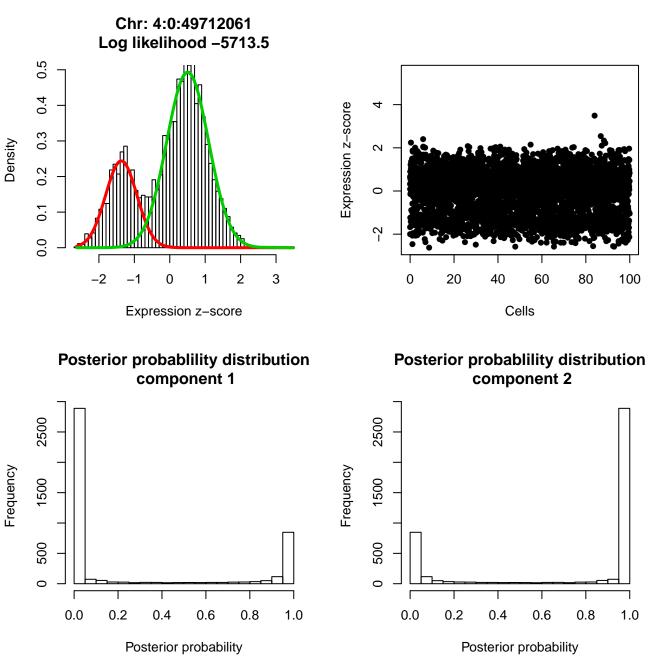
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Posterior probability

Frequency

Density

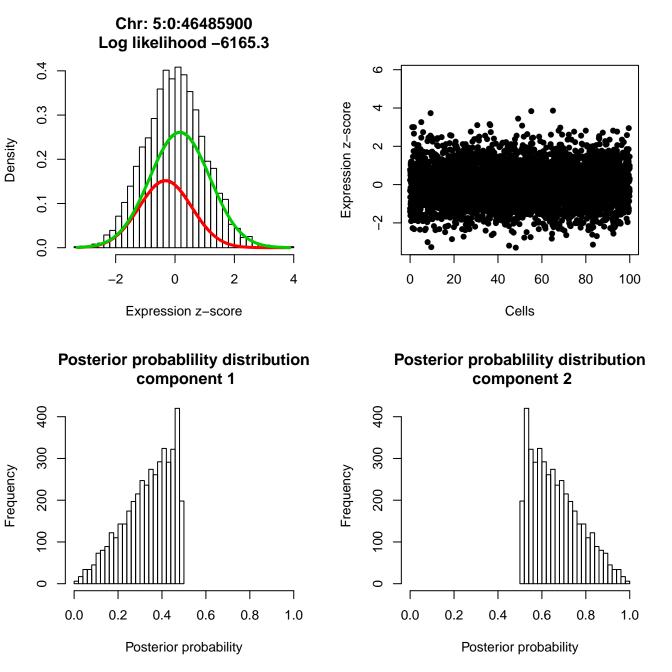




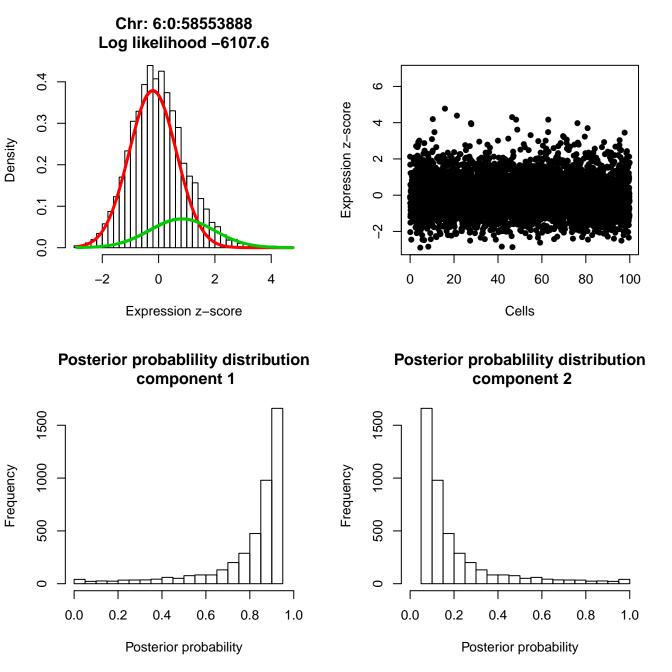
Chr: 4:51743951:190214555 Log likelihood -5485.3 0.5 Expression z-score 0.4 α 0.3 0.2 0 0.1 7 0.0 -3 2 3 0 20 40 60 80 0 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 2500 2500 Frequency Frequency 1500 1500 500 500 0 0 0.0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.6 8.0 0.4 1.0

Posterior probability

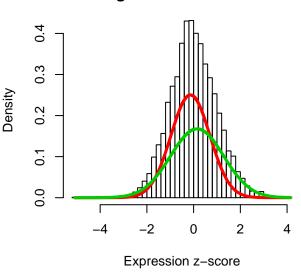
Posterior probability

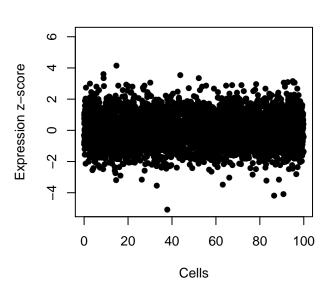


Chr: 5:50059807:181538259 Log likelihood -6154.9 0.4 4 Expression z-score 0.3 α Density 0.2 0 7 0.1 4 0.0 -2 0 2 0 20 40 60 -4 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 3000 3000 Frequency Frequency 1000 1000 0 0 0.0 0.2 0.4 0.6 8.0 0.0 0.2 0.4 0.6 8.0 1.0 1.0 Posterior probability Posterior probability

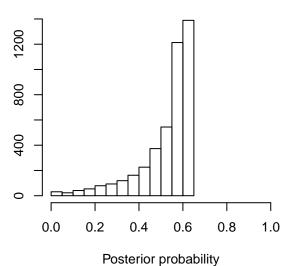


Chr: 6:59829934:170805979 Log likelihood -6156.9



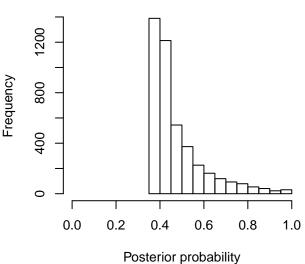


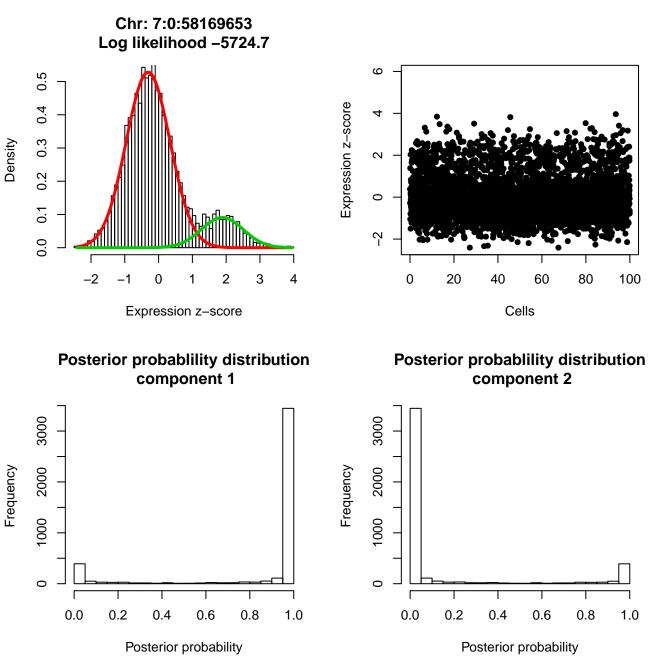
Posterior probablility distribution component 1

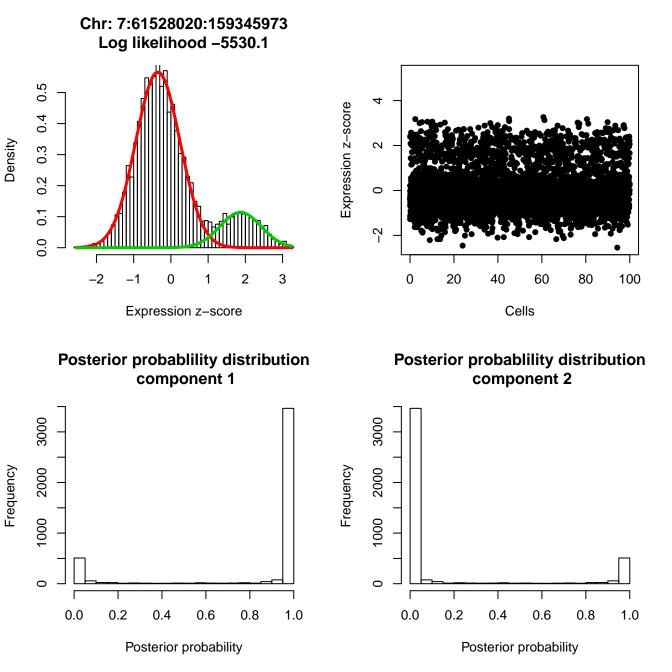


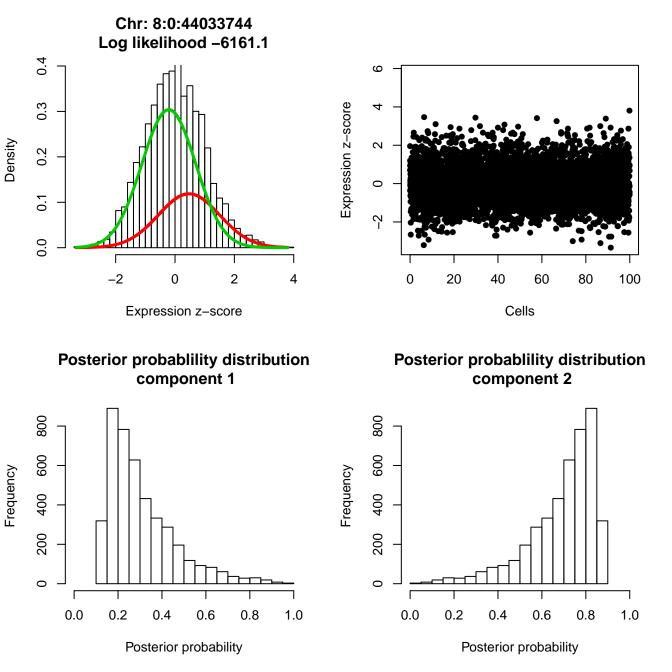
Frequency

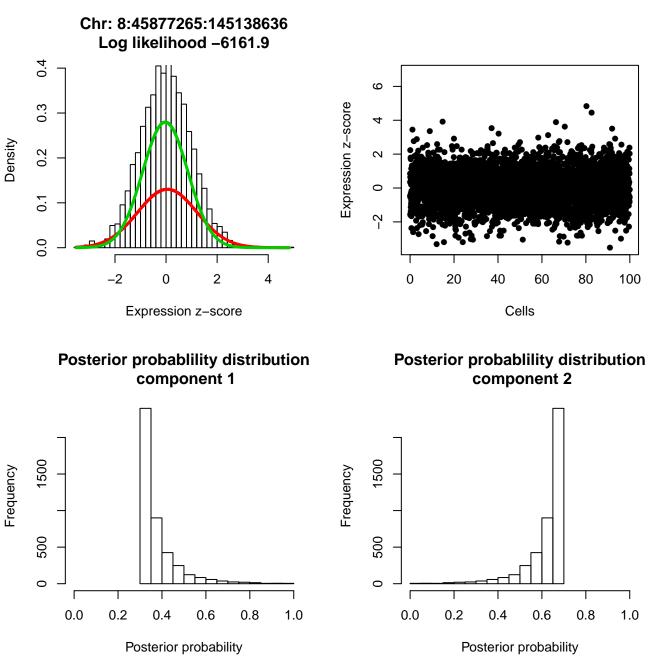
Posterior probablility distribution component 2

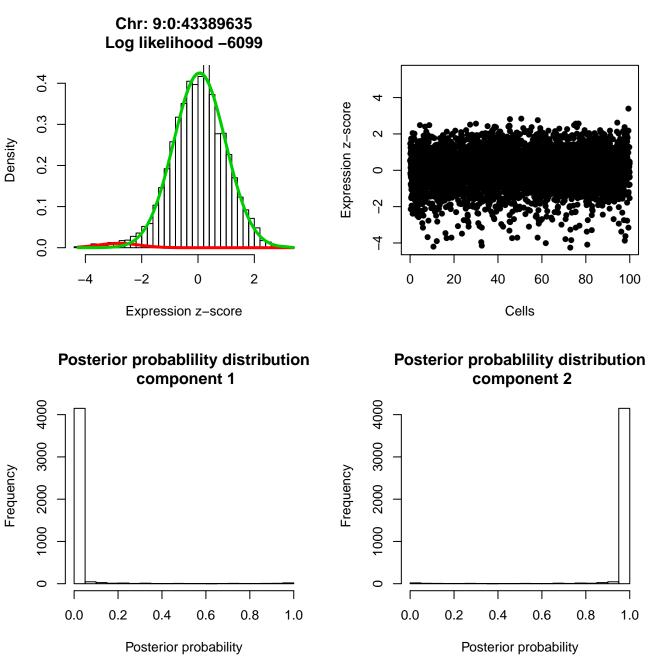


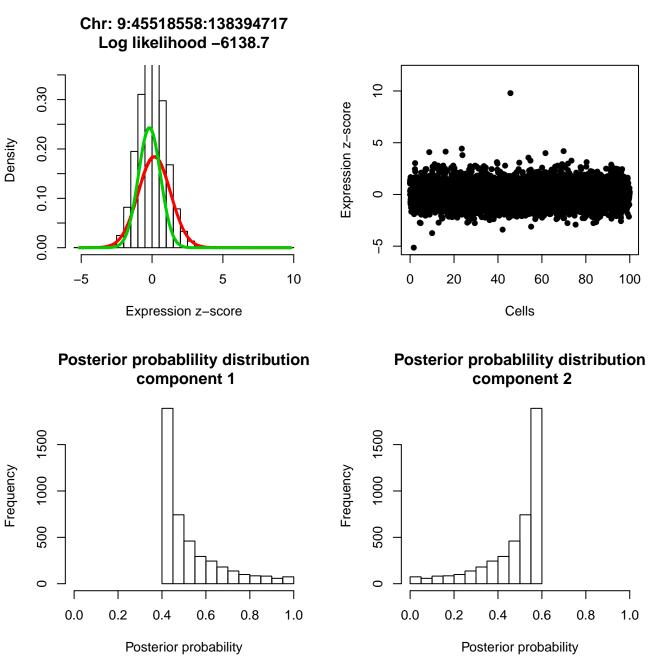




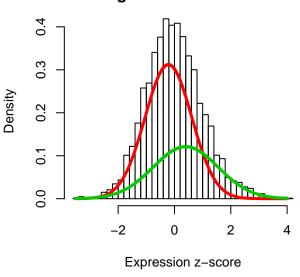


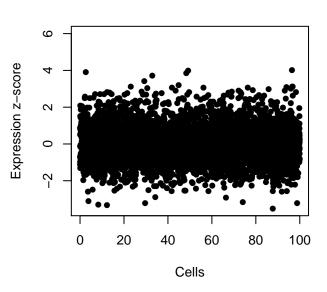




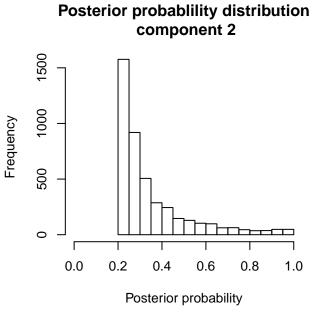


Chr: 10:0:39686682 Log likelihood -6136.5



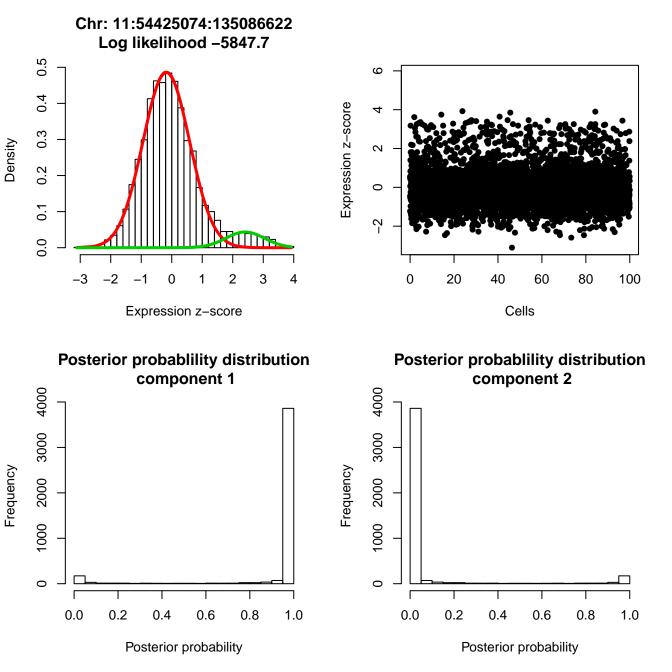


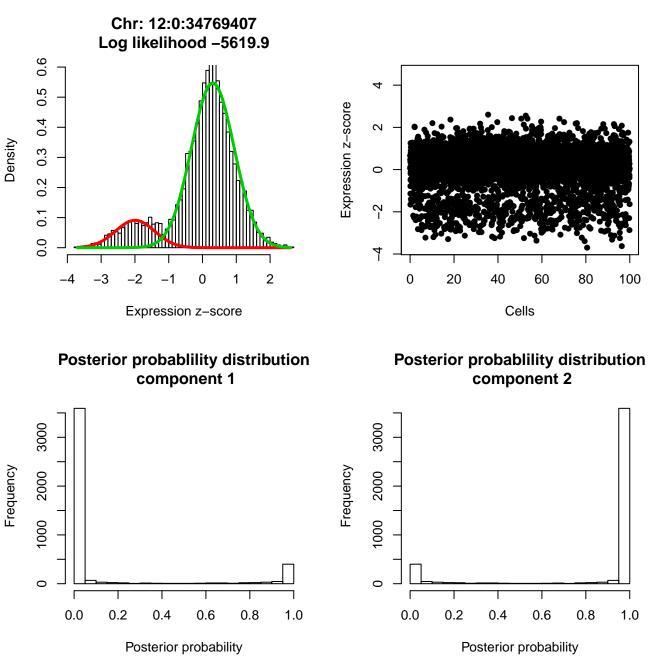
Posterior probablility distribution



Chr: 10:41593521:133797422 Log likelihood -6164.7 0.4 9 0.3 Expression z-score Density \sim 0.2 0 0.1 7 0.0 -2 2 20 80 -4 0 4 0 40 60 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 1500 1500 1000 1000 Frequency Frequency 500 500 0 0 0.2 0.6 8.0 0.0 0.2 8.0 0.0 0.4 1.0 0.4 0.6 1.0 Posterior probability Posterior probability

Chr: 11:0:51078348 Log likelihood -5967.8 9 0.4 Expression z-score 4 0.3 Density α 0.2 0 0.1 7 0.0 -2 0 2 0 20 40 60 80 4 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 2500 2500 Frequency Frequency 1500 1500 500 500 0 0 0.0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.4 0.6 8.0 1.0 Posterior probability Posterior probability





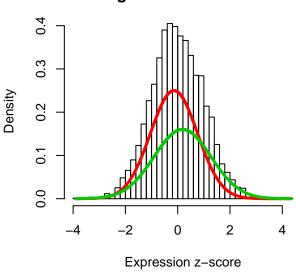
Chr: 12:37185252:133275309 Log likelihood -4445.8 9.0 Expression z-score α Density 0.4 0 0.2 7 0.0 -3 0 2 0 20 40 1 60 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 3000 3000 Frequency Frequency 2000 2000 1000 1000 0 0 0.2 0.6 8.0 0.0 0.2 0.6 8.0 0.0 0.4 1.0 0.4 1.0 Posterior probability Posterior probability

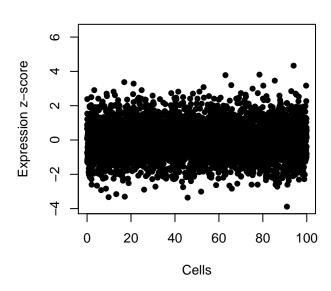
Chr: 13:18051248:114364328 Log likelihood -5684.8 0.5 Expression z-score 0.4 α 0.3 0.2 0 0.1 7 0.0 -3 2 3 0 20 0 40 60 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 3000 3000 2000 Frequency 2000 Frequency 1000 1000 0 0 0.2 0.4 0.6 8.0 0.0 0.2 0.6 8.0 0.0 1.0 0.4 1.0 Posterior probability Posterior probability

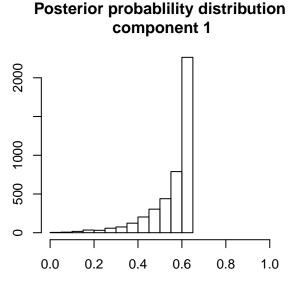
Chr: 14:18173523:107043718 Log likelihood -6092.4 9.4 9 0.3 Expression z-score 4 \sim Density 0.2 0 7 0.1 0.0 9 -2 0 20 40 80 -6 0 2 60 100 4 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 1500 1500 Frequency Frequency 1000 1000 200 200 0 0 0.2 0.6 8.0 0.0 0.2 0.6 8.0 0.0 0.4 1.0 0.4 1.0 Posterior probability Posterior probability

Chr: 15:19725254:101991189 Log likelihood -6145.8 9 0.3 Expression z-score 4 Density α 0.2 0 7 0.1 0.0 9 0 20 40 60 80 -6 -4 2 4 100 0 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 2500 2500 Frequency Frequency 1500 1500 500 500 0 0 0.0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.4 0.6 8.0 1.0 Posterior probability Posterior probability

Chr: 16:0:36311158 Log likelihood -6163.4

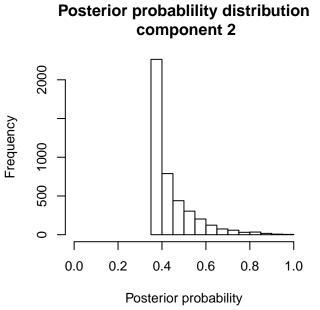




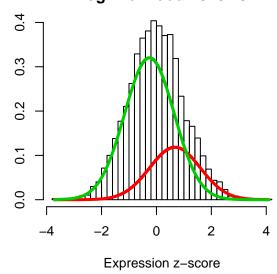


Posterior probability

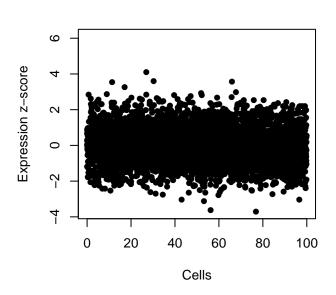
Frequency



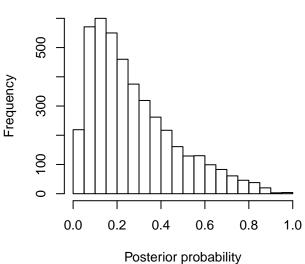
Chr: 16:36334460:90338345 Log likelihood -6164.3



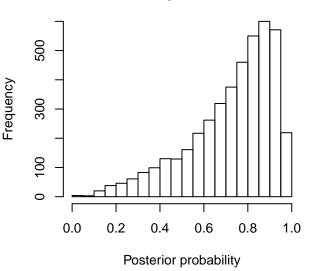
Density

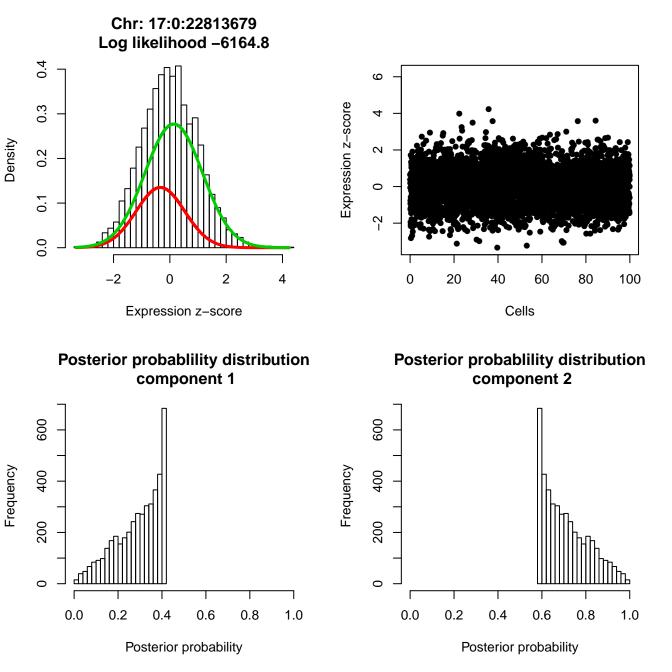


Posterior probablility distribution component 1

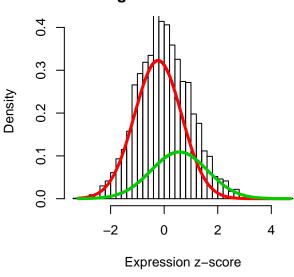


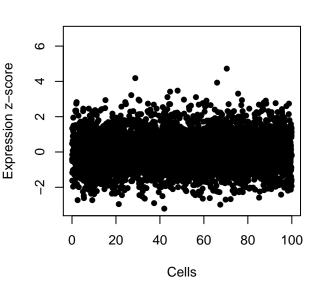
Posterior probablility distribution component 2



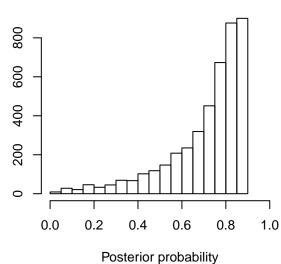


Chr: 17:26566633:83257441 Log likelihood -6151.8



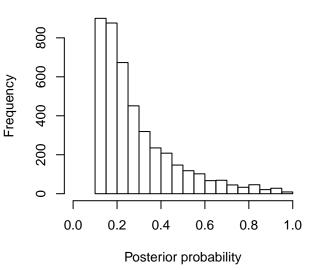


Posterior probablility distribution component 1

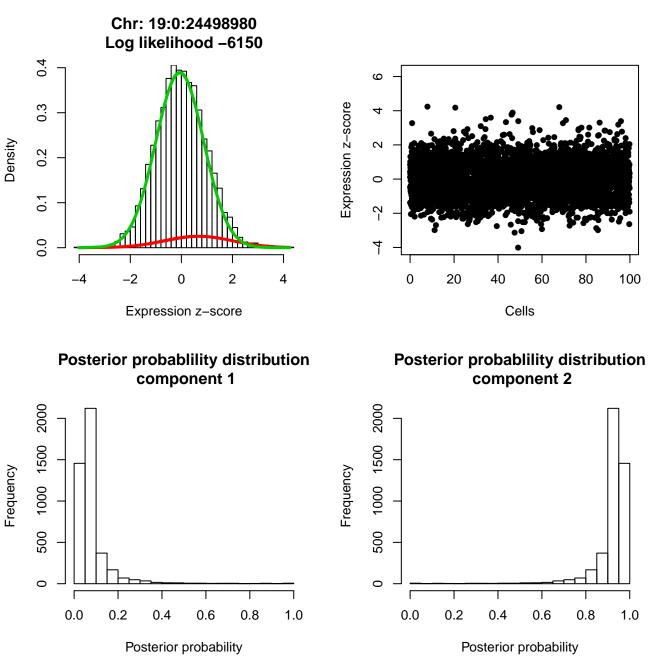


Frequency

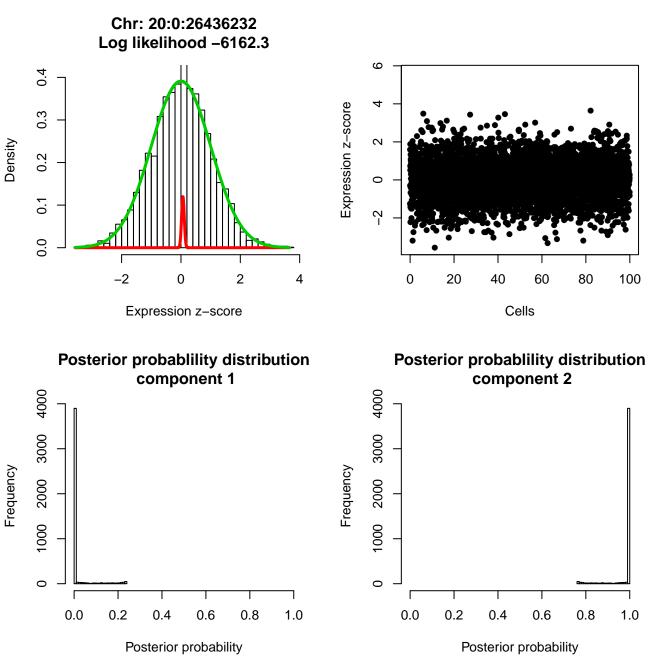
Posterior probablility distribution component 2



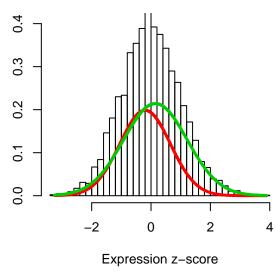
Chr: 18:20861206:80373285 Log likelihood -6157.3 9.4 9 Expression z-score 4 0.3 Density α 0.2 0 0.1 7 0.0 4 0 2 0 20 40 -4 -2 60 80 100 4 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 1500 1500 Frequency Frequency 1000 1000 200 500 0 0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.6 8.0 0.0 0.4 1.0 Posterior probability Posterior probability



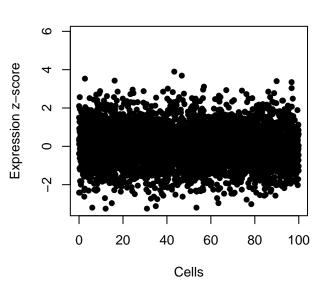
Chr: 19:27190874:58617616 Log likelihood -5192.5 9.0 9 Expression z-score 0.4 Density α 0.2 0 7 0.0 -2 0 2 0 20 40 60 4 80 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 4000 4000 3000 3000 Frequency Frequency 1000 2000 2000 1000 0 0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.6 8.0 0.0 0.4 1.0 Posterior probability Posterior probability

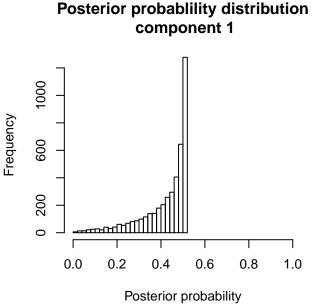


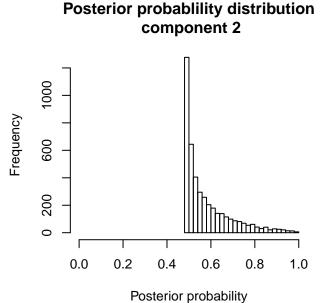
Chr: 20:30038348:64444167 Log likelihood –6162.4



Density







Chr: 21:12915808:46709983 Log likelihood -6167 9.4 9 Expression z-score 0.3 Density \sim 0.2 0 0.1 7 0.0 -2 0 2 0 20 40 80 4 60 100 Expression z-score Cells Posterior probablility distribution Posterior probablility distribution component 1 component 2 2000 2000 Frequency Frequency 1000 500 1000 200 0 0 0.0 0.2 0.4 0.6 8.0 1.0 0.0 0.2 0.4 0.6 8.0 1.0 Posterior probability Posterior probability

