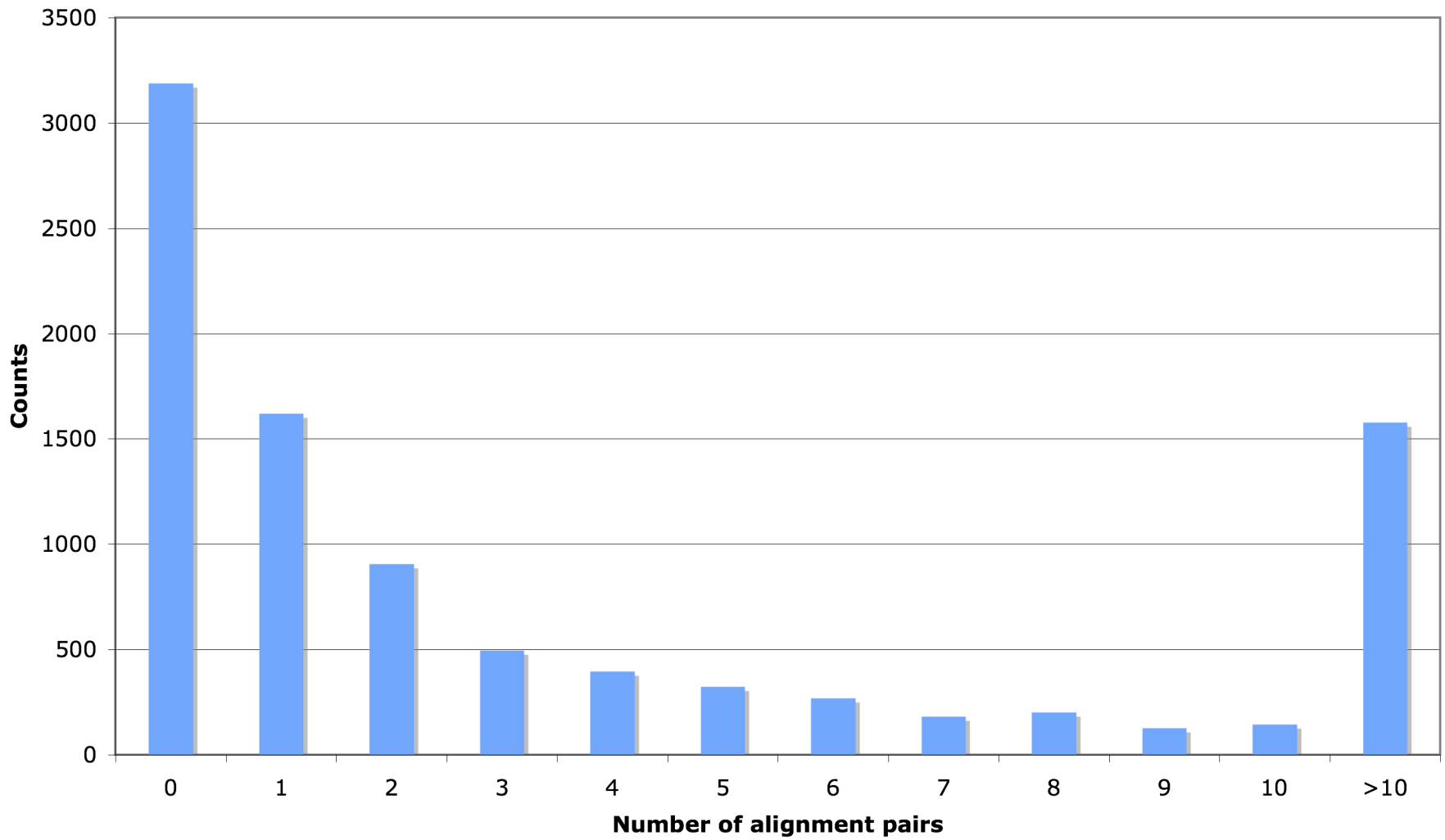


PseudoSeq Update

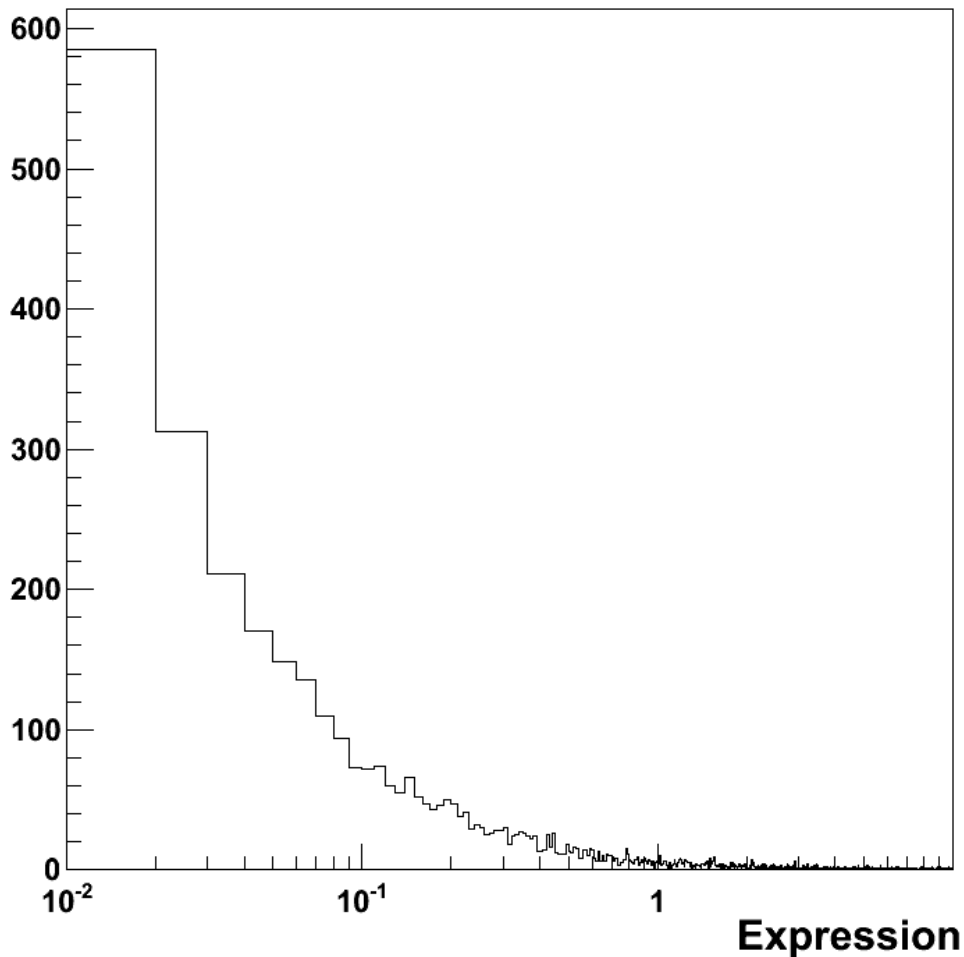
Lukas Habegger

12/9/2010

GENCODE v3b: Number of alignment pairs
MIN (blockSize) = 100, Total number of alignment pairs = 9432



Pseudogene transcription: how to select the threshold?



Non-zero
pseudogene
expression values
(DCPMs)

Threshold = 0.1

Alignment pairs	Expressed	Not expressed
0	184	3005
1 to 10	1720	2945
>10	760	818

Notes:

- Final number; considered expressed
- Apply PseudoSeq (evaluate all alignment pairs)
 - Expression (p gene) >> Expression (gene)
 - Discordant expression pattern
 - Concordant expression pattern
- Too many alignment pairs; evaluation not feasible

More thresholds

Threshold = 0.01

Alignment pairs	Expressed	Not expressed
0	576	2613
1 to 10	2807	1858
>10	1121	457

Threshold = 0.5

Alignment pairs	Expressed	Not expressed
0	64	3125
1 to 10	799	3866
>10	520	1058

Threshold = 0.05

Alignment pairs	Expressed	Not expressed
0	268	2921
1 to 10	2094	2571
>10	863	715

Threshold = 1

Alignment pairs	Expressed	Not expressed
0	40	3149
1 to 10	526	4139
>10	418	1160

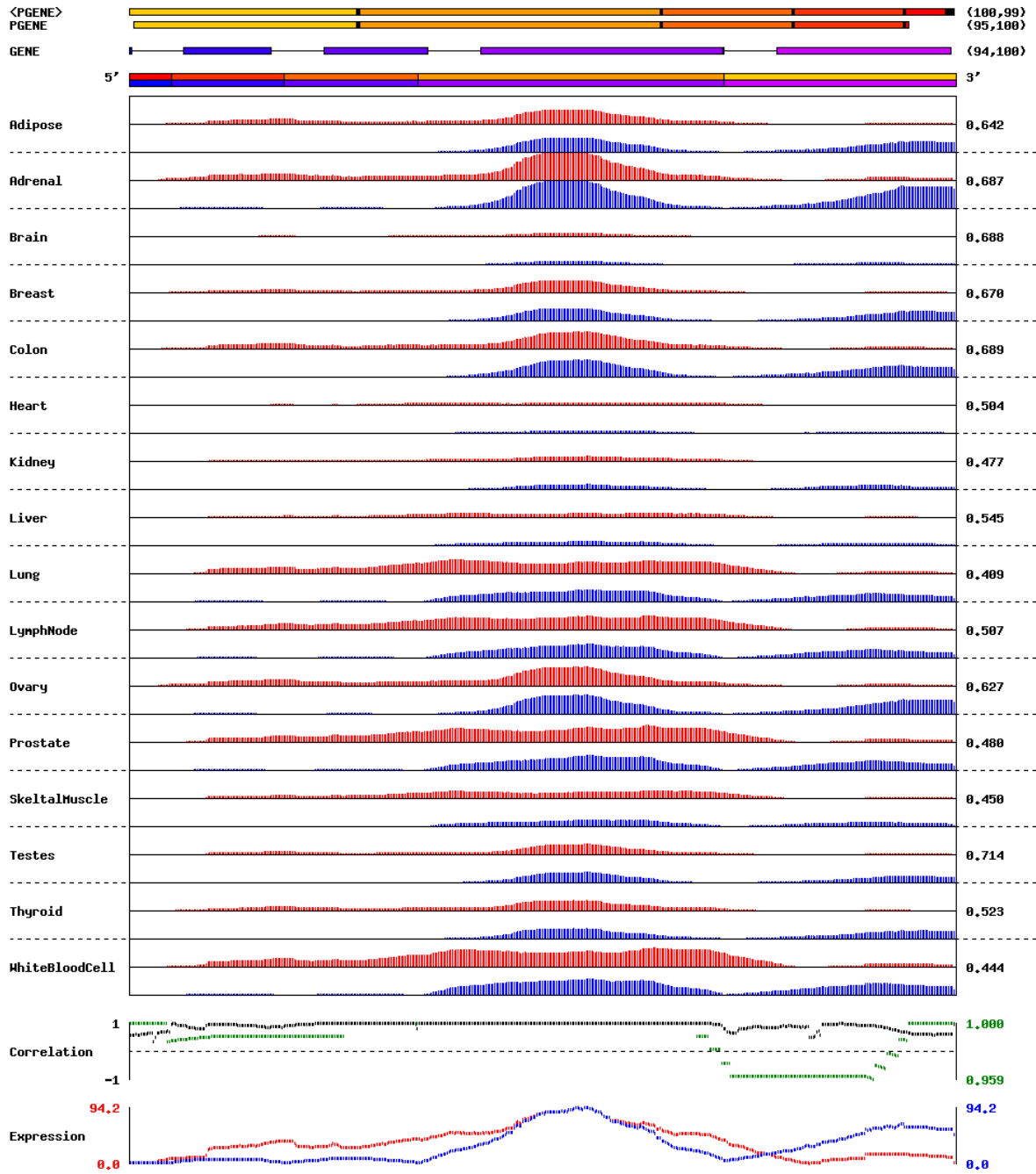
Threshold = 0.1

Alignment pairs	Expressed	Not expressed
0	184	3005
1 to 10	1720	2945
>10	760	818

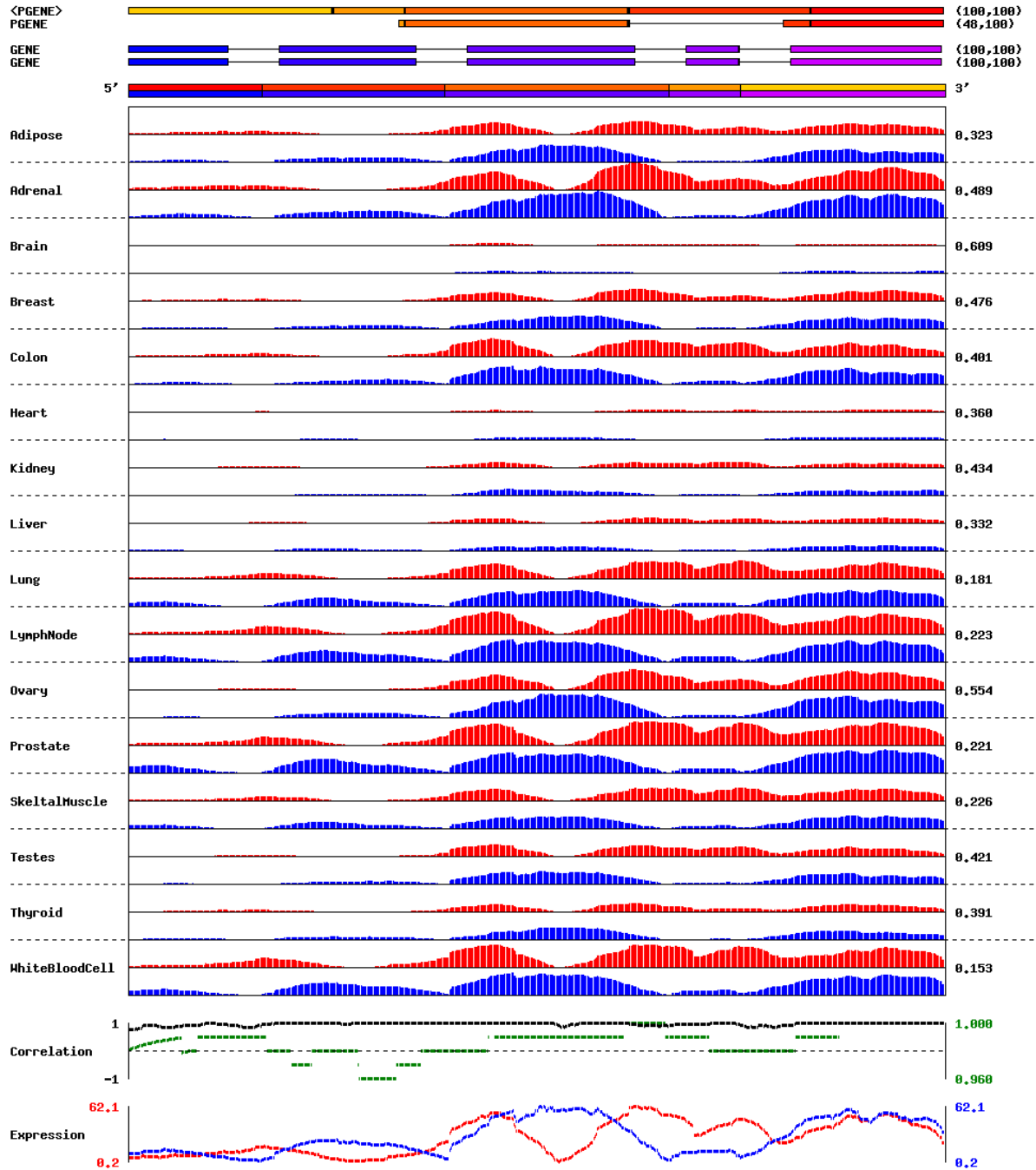
Threshold = 5

Alignment pairs	Expressed	Not expressed
0	6	3183
1 to 10	148	4517
>10	204	1374

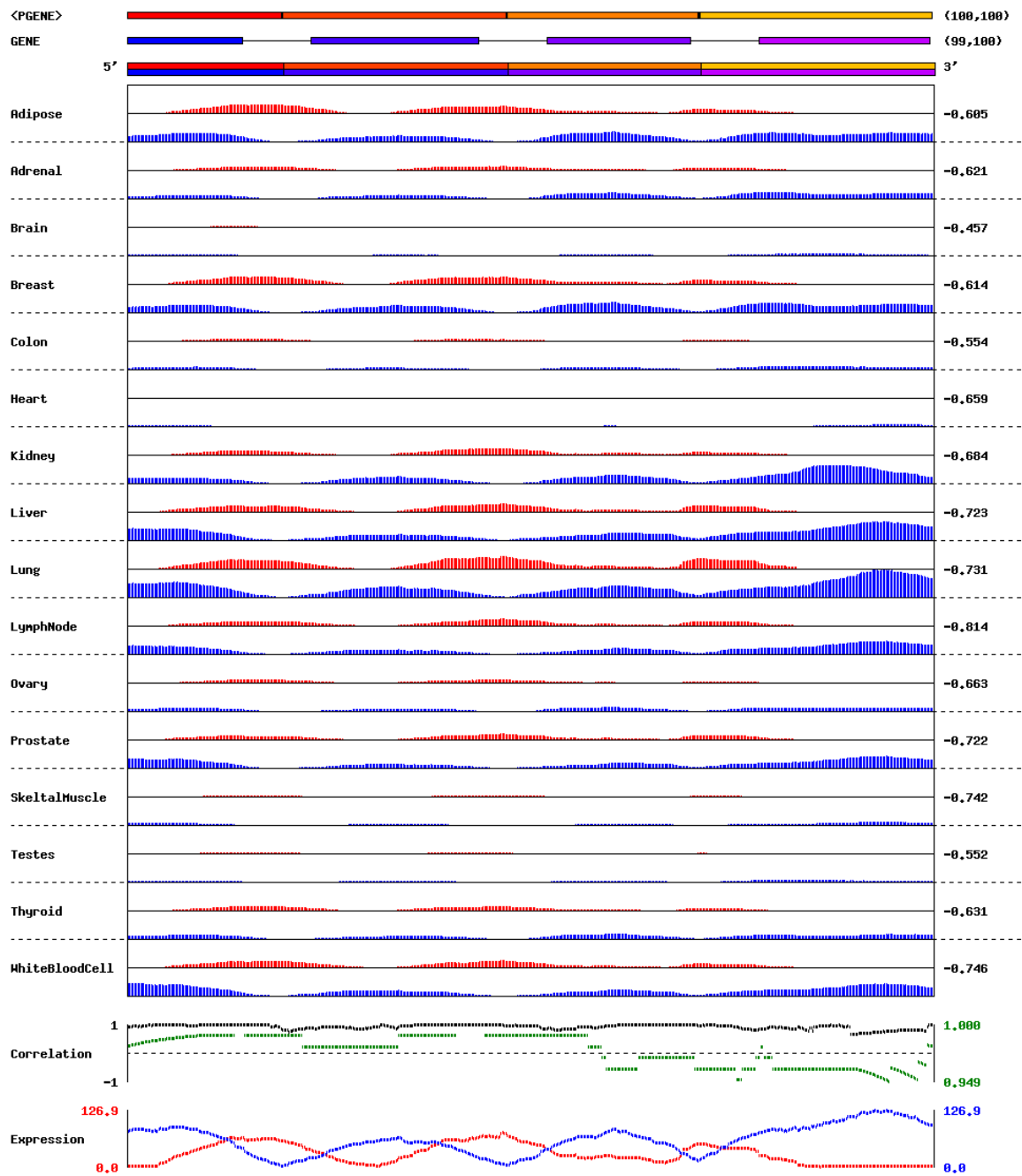
Name: ENSG00000218426_ENST00000492974_1, Length: 470, %ID: 98.9, APC: 0.866, APMC: 0.566
 Scale [0.00 213.92], Average: 35.16
 Scale [0.00 213.92], Average: 30.26



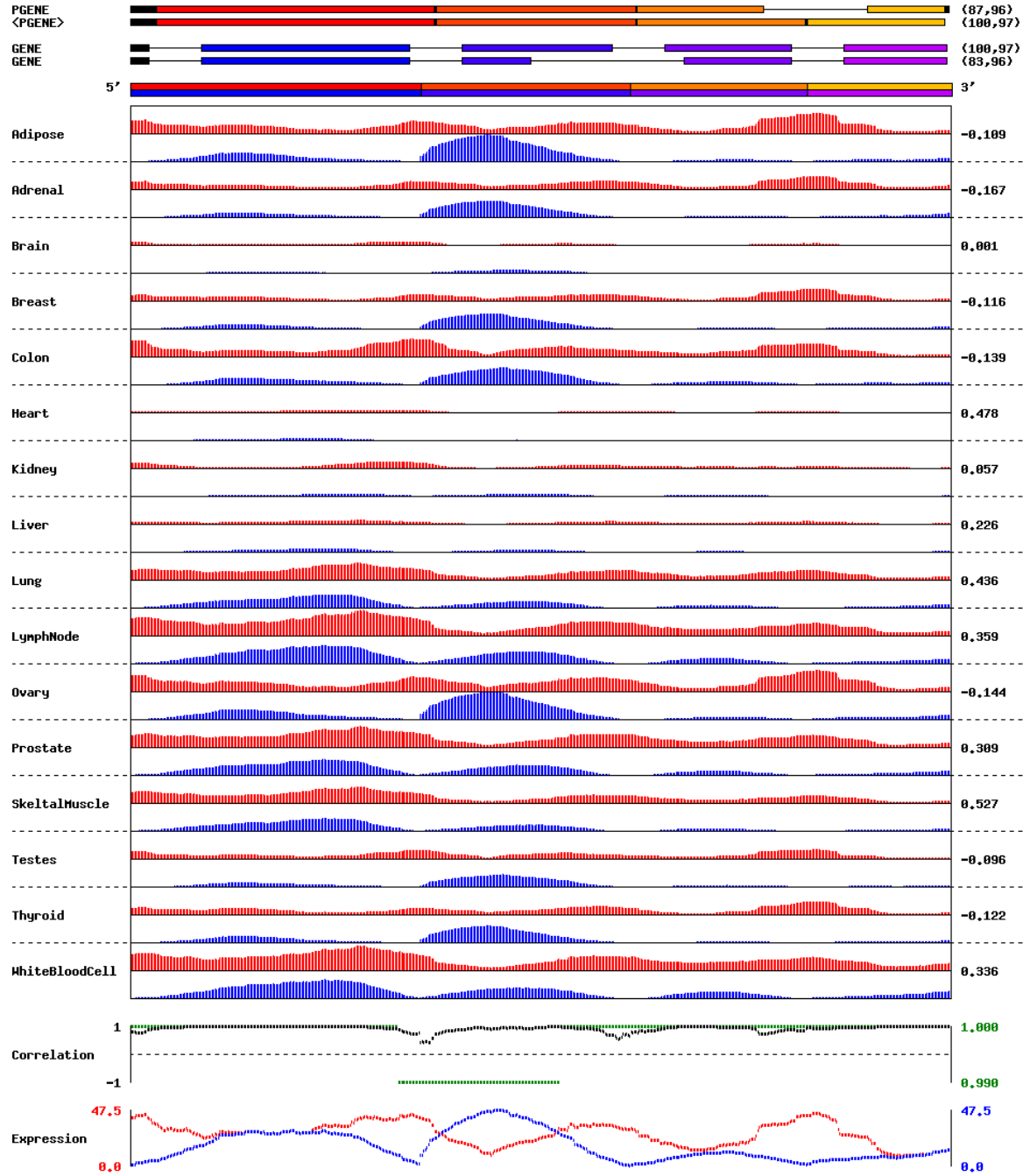
Name: ENSG00000215030_ENST00000392730_1, Length: 635, %ID: 98.6, APC: 0.929, APMC: 0.362
 Scale [0,02 110.78], Average: 26.60
 Scale [0,02 110.78], Average: 27.28



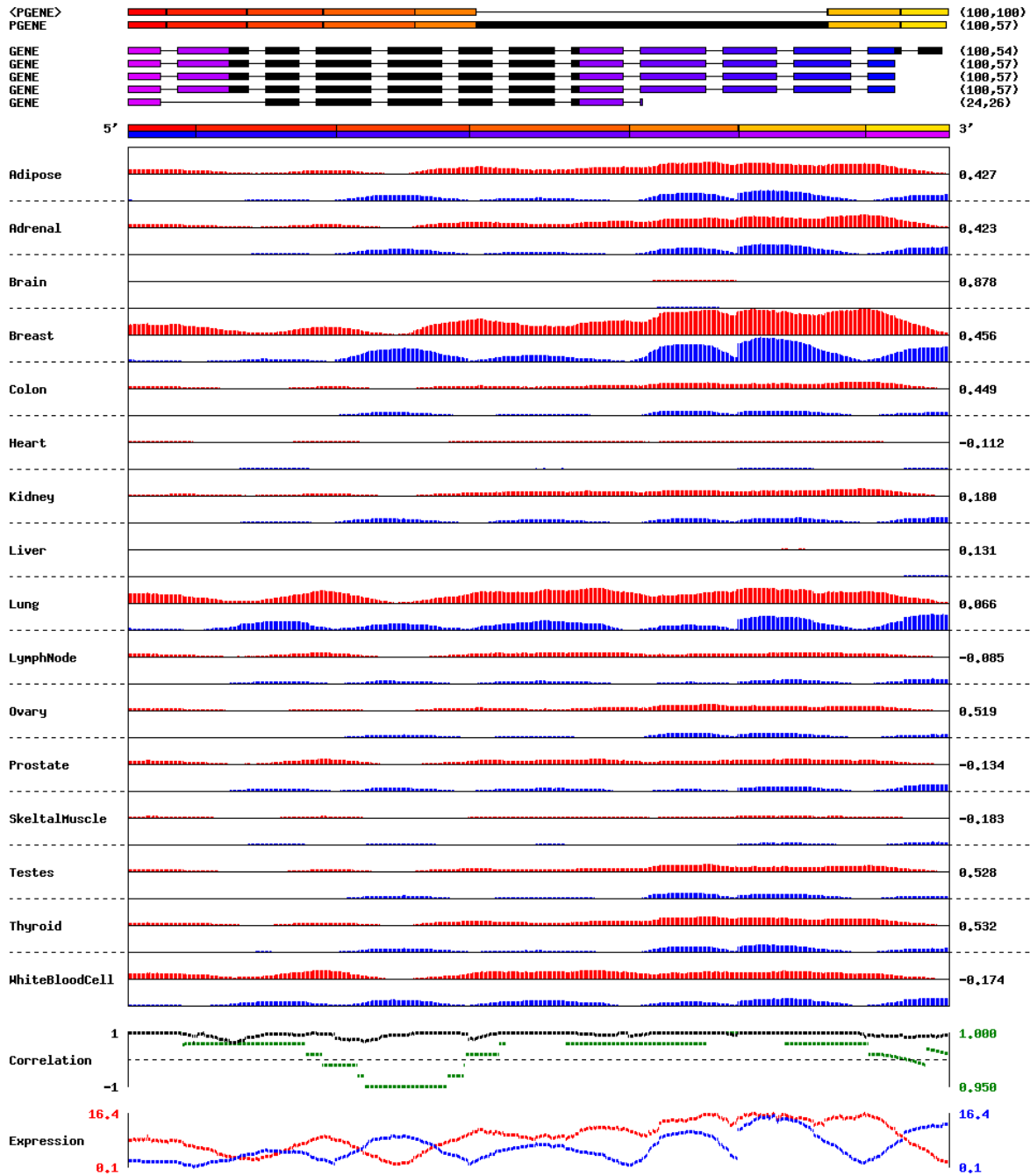
Name: ENSG00000226608_ENST00000427242_1, Length: 528, %ID: 97.7, APC: 0.910, APHC: -0.657
 Scale [0.00 392.64], Average: 28.44
 Scale [0.00 392.64], Average: 59.27



Name: ENSG00000218754_ENST00000462885_1, Length: 511, %ID: 99.8, APC: 0.884, APWC: 0.115
 Scale [0.00 114.79], Average: 26.96
 Scale [0.00 114.79], Average: 16.34



Name: ENSG00000231991_ENST00000426153_1, Length: 585, %ID: 98.5, APC: 0.900, APHC: 0.244
 Scale [0.01 59.14], Average: 9.30
 Scale [0.01 59.14], Average: 5.94



Name: ENSG00000226243_ENST00000412502_1, Length: 277, %ID: 95.7, APC: 0.830, APMC: -0.161
 Scale [0,30 149,43], Average: 20.65
 Scale [0,30 149,43], Average: 38.26

