Wild–type Cluster – A
Within cluster Pearson correlation – 0.775
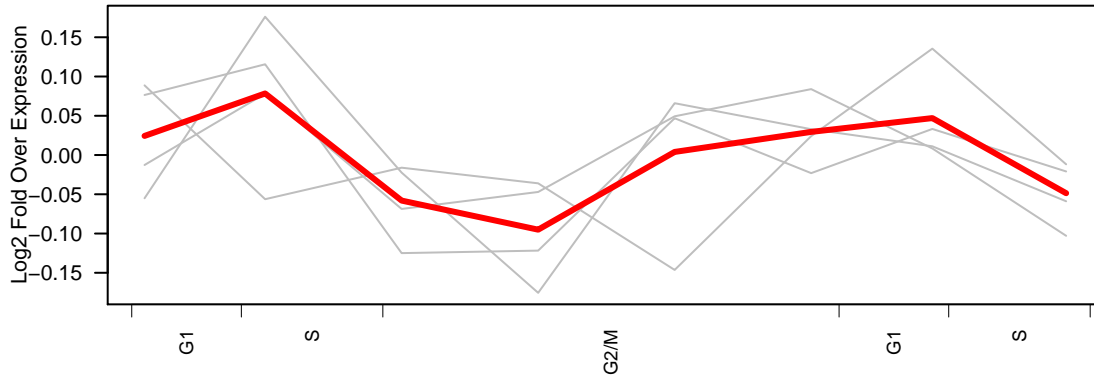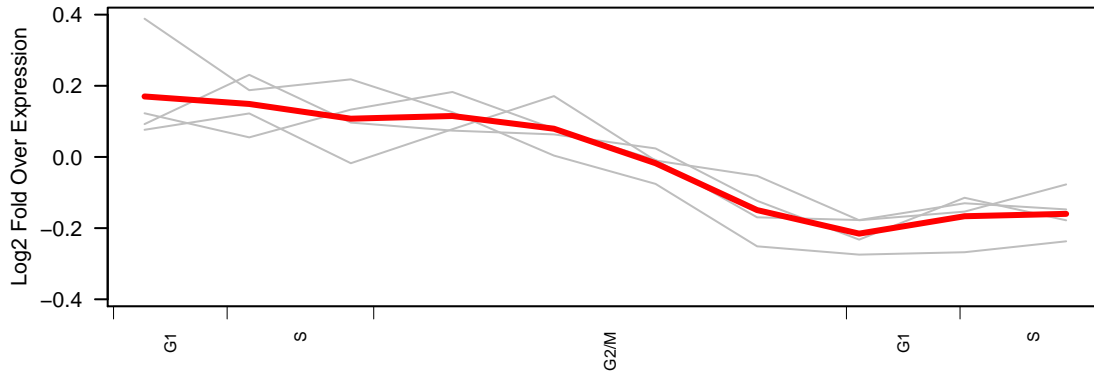
Sub Clust. 1
0.852

Centroids of clusters from Figure 3

Figure S5 │ **Transcript profiles within each wild-type cluster and cyclin mutant subcluster from Fig. 3 display high Pearson correlation.** The top panel of each page displays the wild-type log2-fold change expression profile for each gene (gray lines) in a particular wild-type cluster, overlaid with that cluster's centroid (red line). The bottom panel(s) display the cyclin mutant log2-fold change expression profiles (gray lines) and centroids (red line) for all genes in each subcluster associated with the wild-type cluster. Each panel is annotated with the cluster or subcluster name (as labeled in Fig. 3), as well as the average Pearson correlation between all genes displayed in the panel. The list of genes in each cluster/subcluster can be found in Supplementary Table 1.

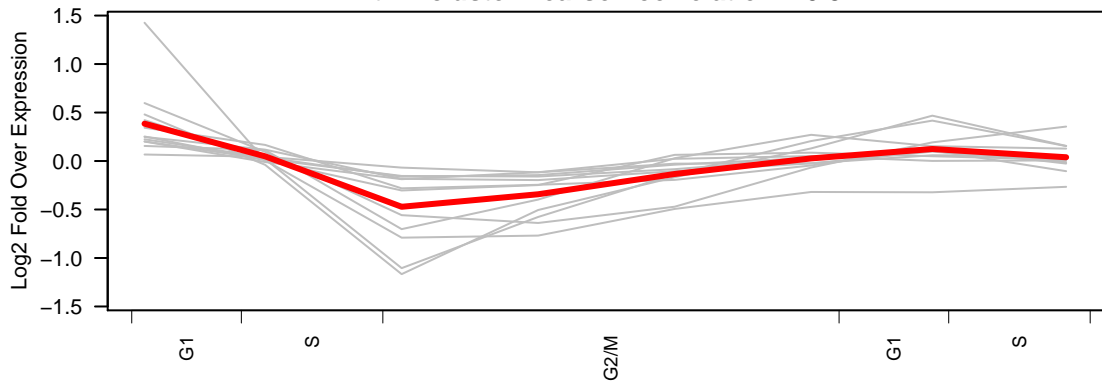# Wild−type Cluster − B
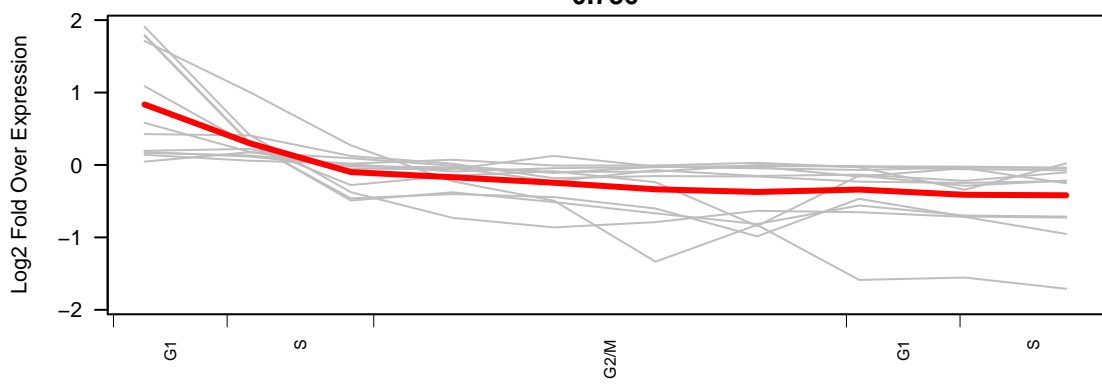## Within cluster Pearson correlation − 0.625

Sub Clust. 2
0.762

Centroids of clusters from Figure 3

Wild–type Cluster – C
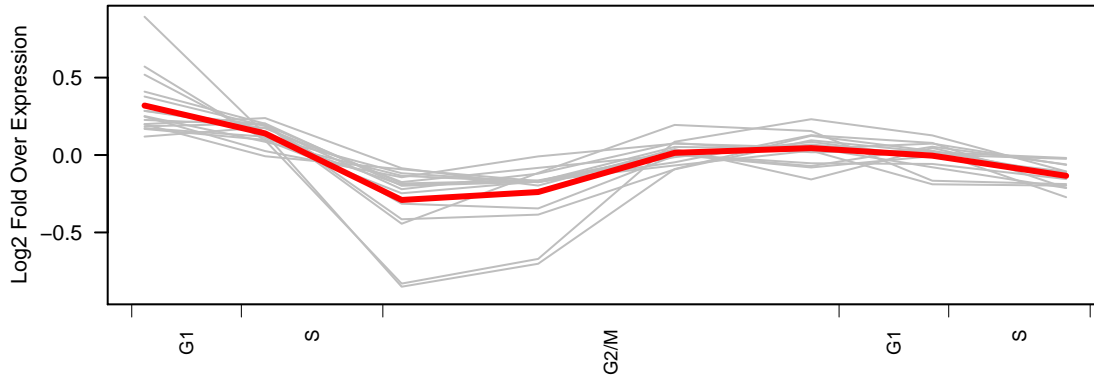## Within cluster Pearson correlation – 0.811
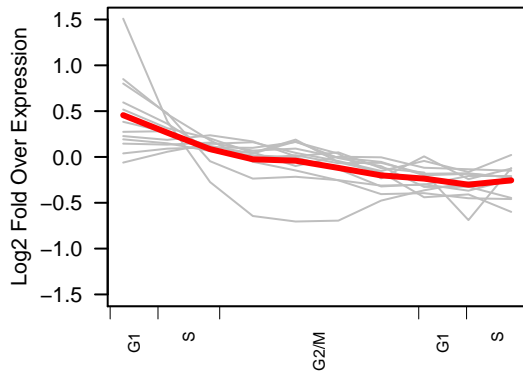

Sub Clust. 3
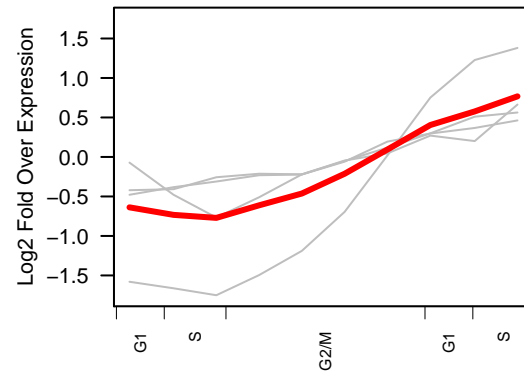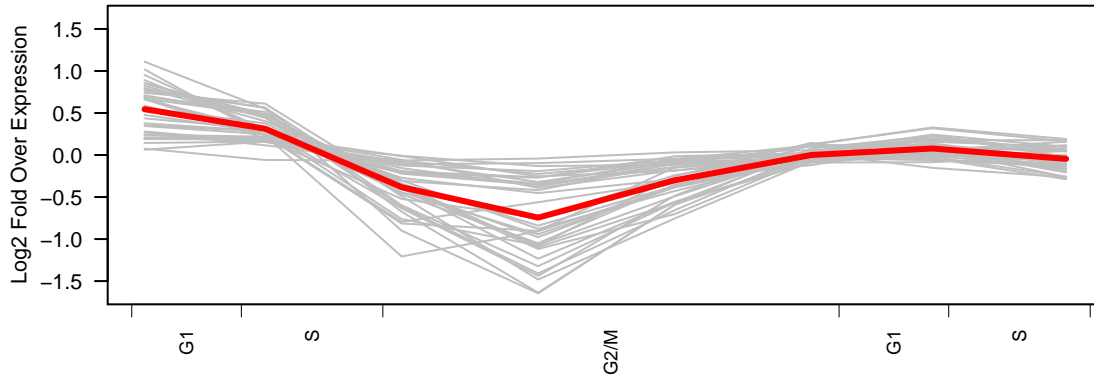## 0.736

Centroids of clusters from Figure 3

Wild−type Cluster − D
Within cluster Pearson correlation − 0.817
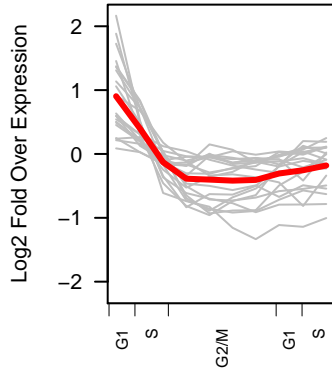
Sub Clust. 4
0.753

Sub Clust. 5
0.934

Centroids of clusters from Figure 3

Wild−type Cluster − E
Within cluster Pearson correlation − 0.872
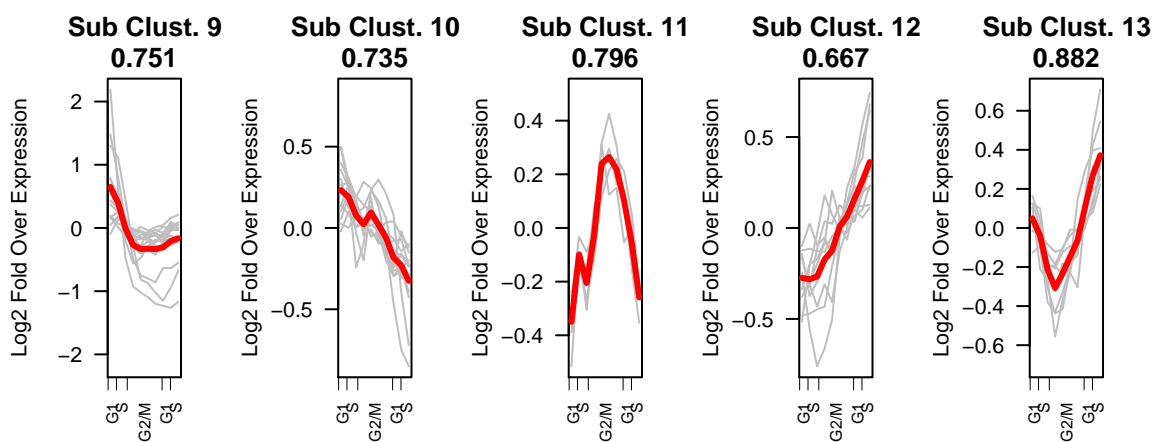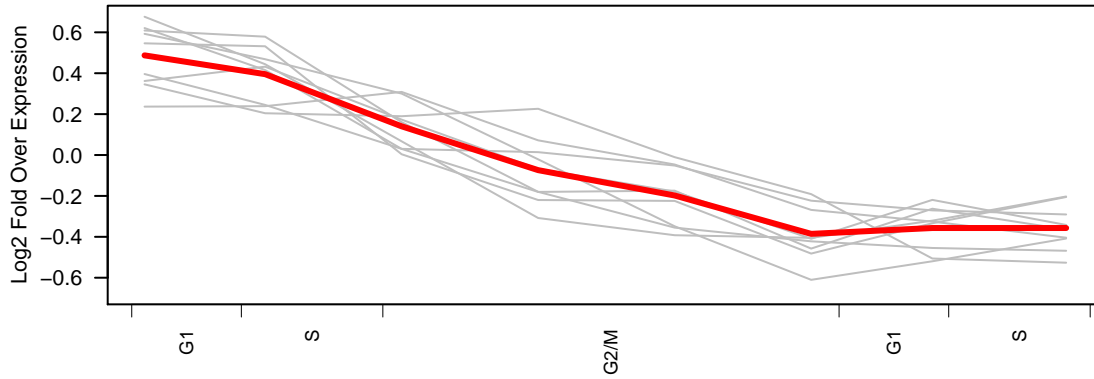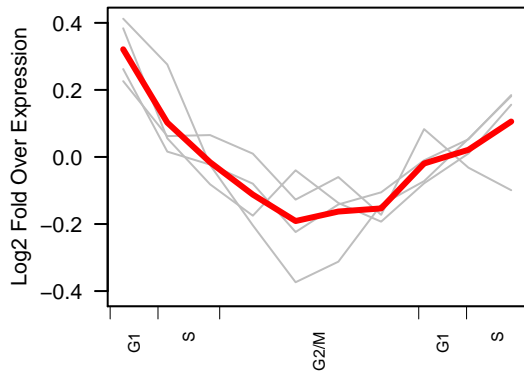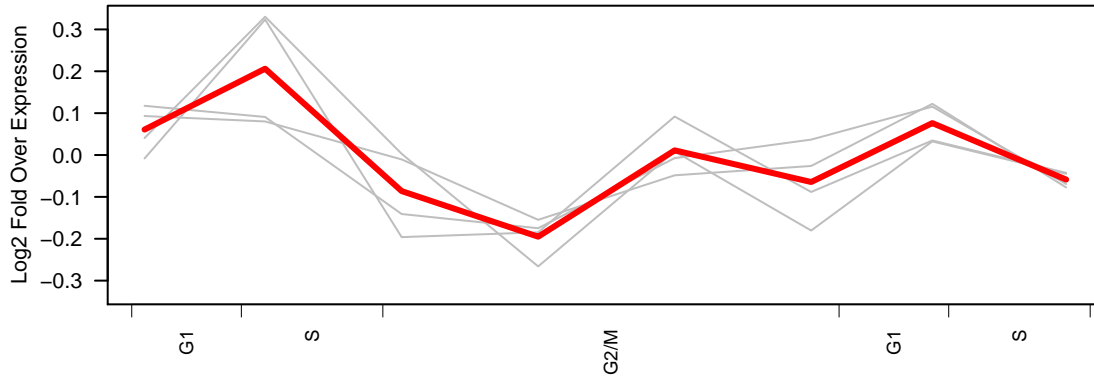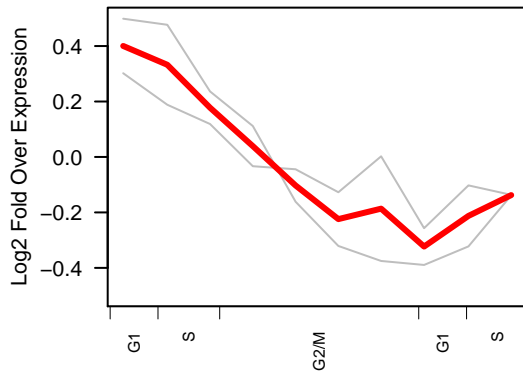
Sub Clust. 6
0.804

Sub Clust. 7
0.754
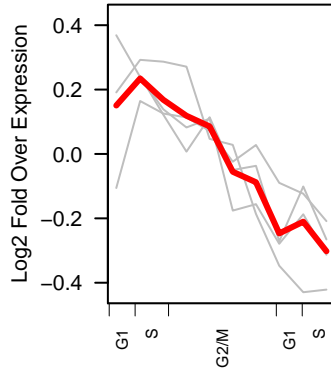
Sub Clust. 8
0.765
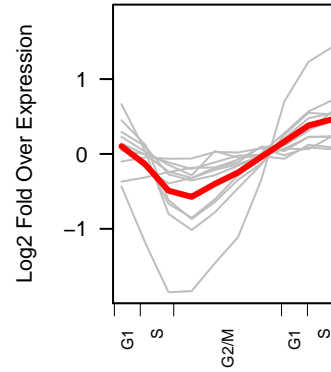
Centroids of clusters from Figure 3

Wild−type Cluster − F
Within cluster Pearson correlation − 0.889

Sub Clust. 9
0.751

Sub Clust. 10
0.735

Sub Clust. 11
0.796

Sub Clust. 12
0.667
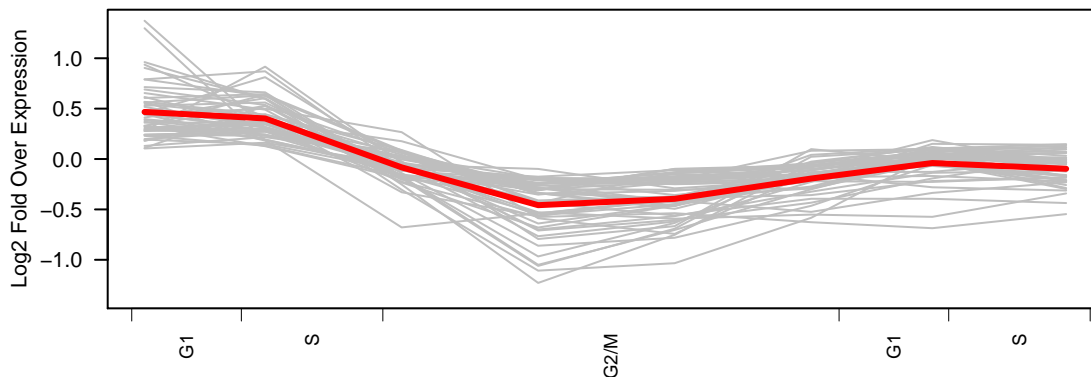
Sub Clust. 13
0.882

Centroids of clusters from Figure 3

Wild−type Cluster − G
Within cluster Pearson correlation − 0.871

Sub Clust. 14
0.697

Sub Clust. 15
0.674
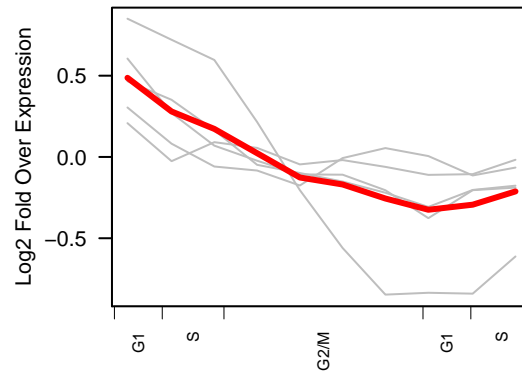
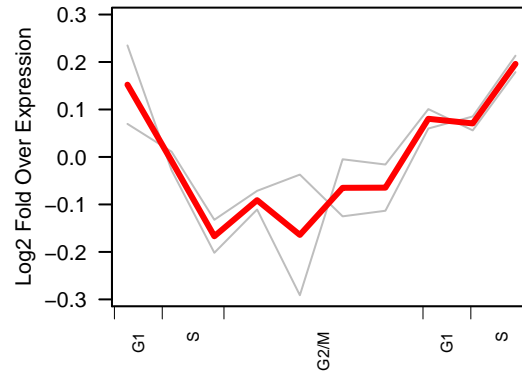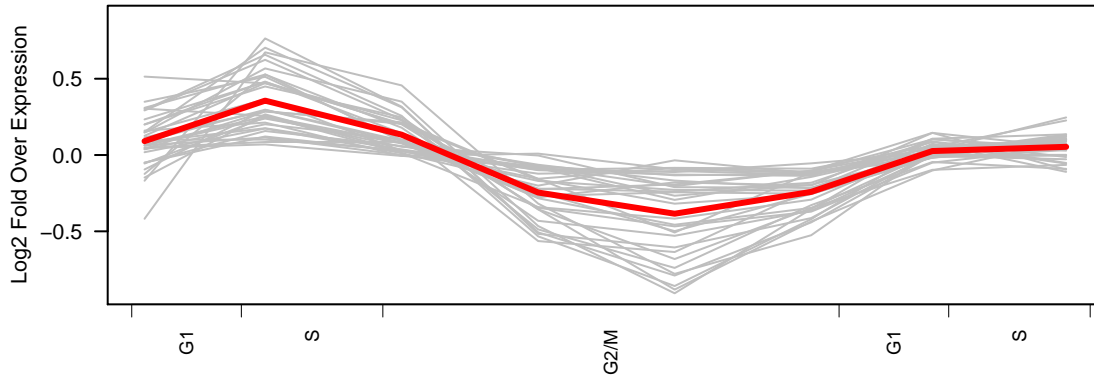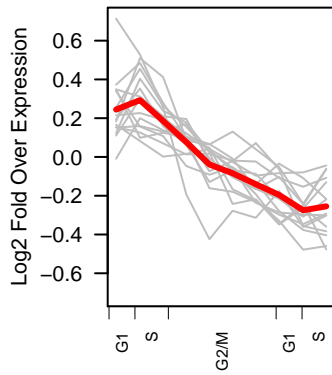Centroids of clusters from Figure 3

Wild−type Cluster − H
Within cluster Pearson correlation − 0.665

Sub Clust. 16
0.944

Sub Clust. 17
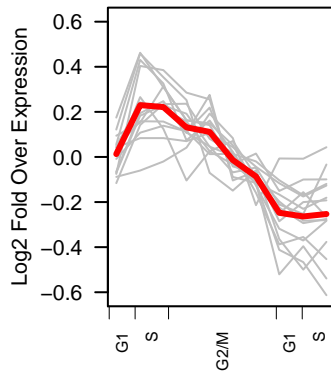### 0.736

Centroids of clusters from Figure 3

Wild−type Cluster − I
Within cluster Pearson correlation − 0.892

Sub Clust. 18
0.791

Sub Clust. 19
0.811

Sub Clust. 20
0.887
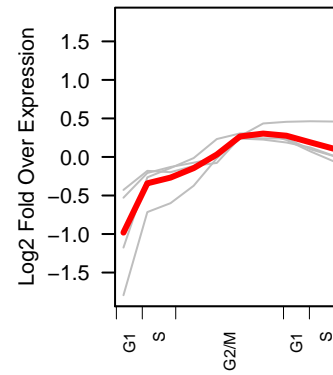
Centroids of clusters from Figure 3

Wild−type Cluster − J
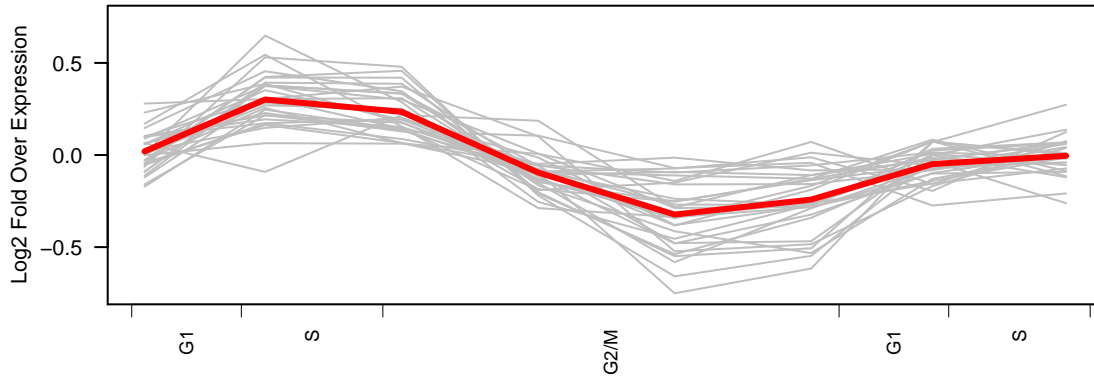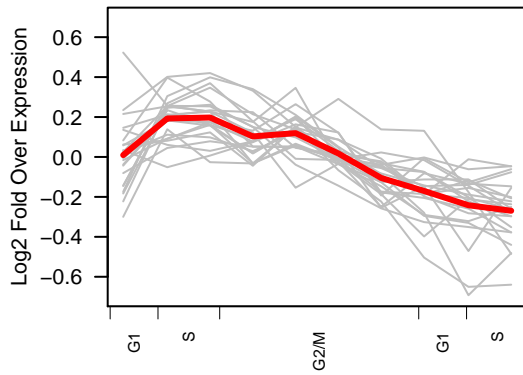## Within cluster Pearson correlation − 0.68
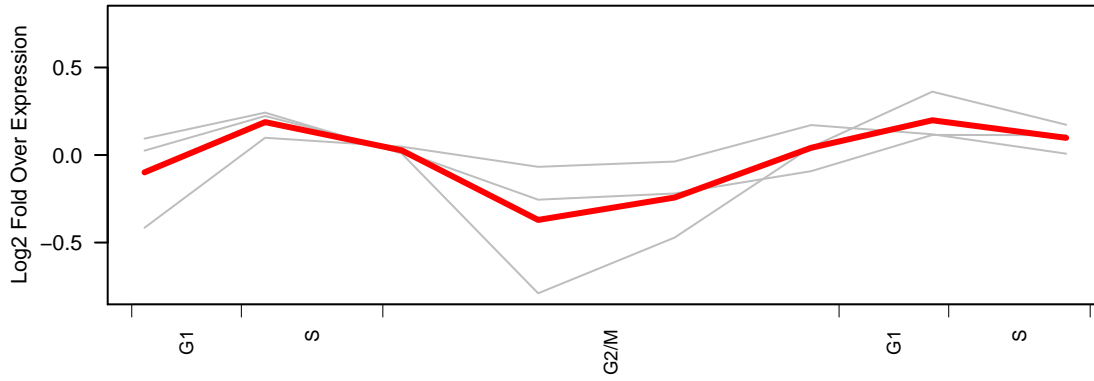
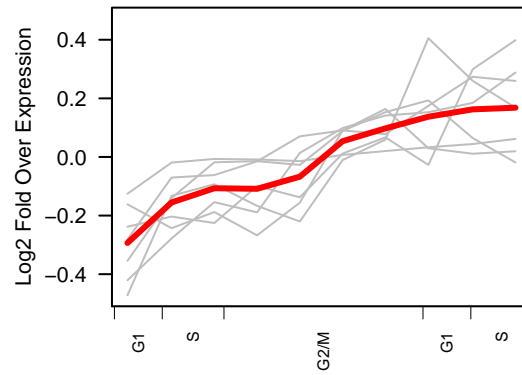# Sub Clust. 21
0.904
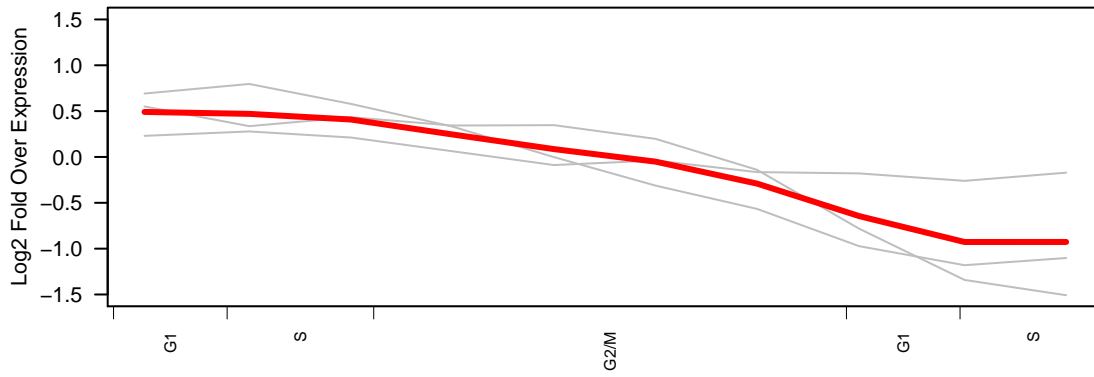
Centroids of clusters from Figure 3

Wild−type Cluster − K
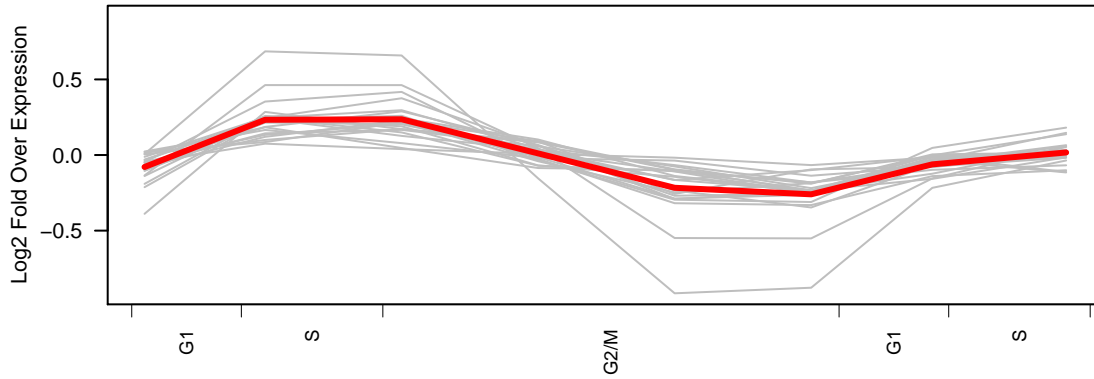### Within cluster Pearson correlation − 0.863

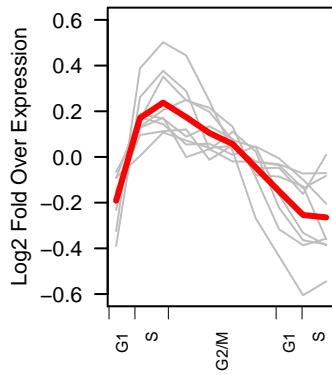## Sub Clust. 22
0.757

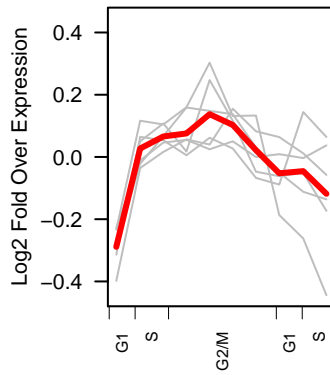## Sub Clust. 23
0.734

Centroids of clusters from Figure 3

Wild−type Cluster − L
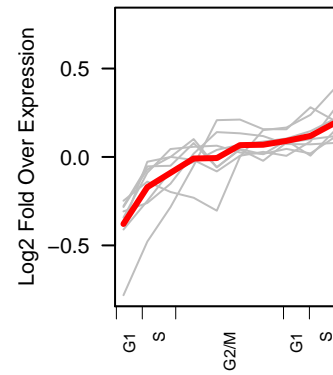## Within cluster Pearson correlation − 0.899

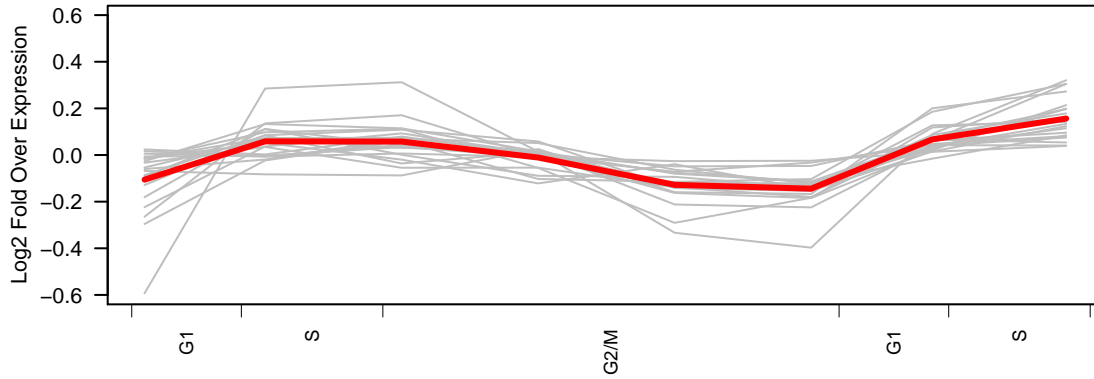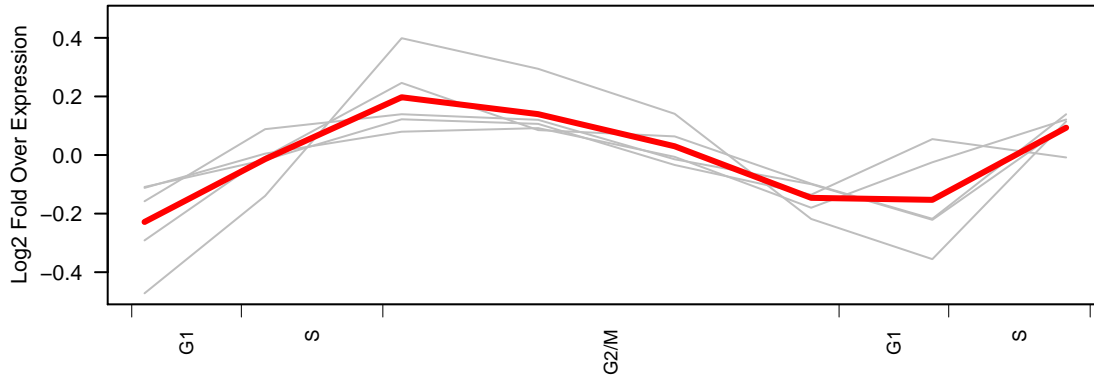## Sub Clust. 24
0.85

Sub Clust. 25
0.723

Sub Clust. 26
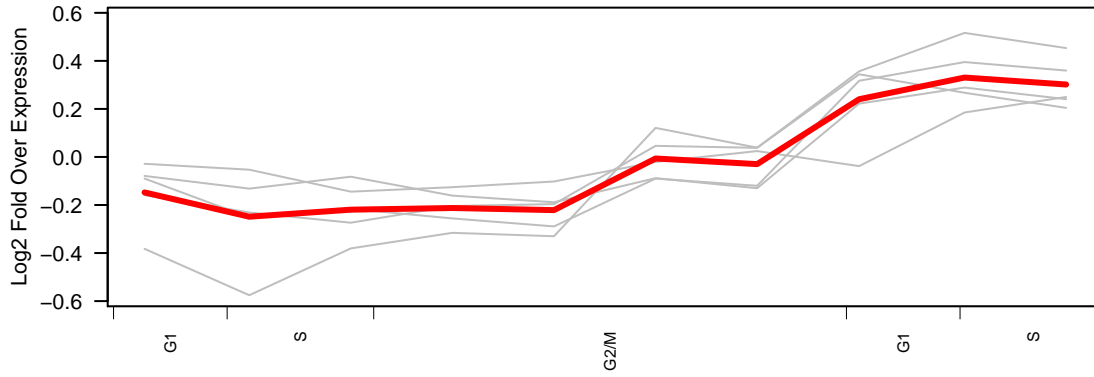## 0.802

Centroids of clusters from Figure 3
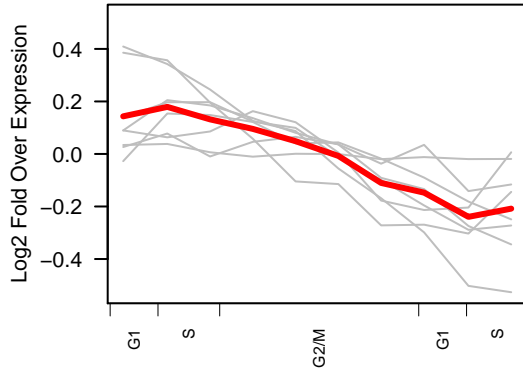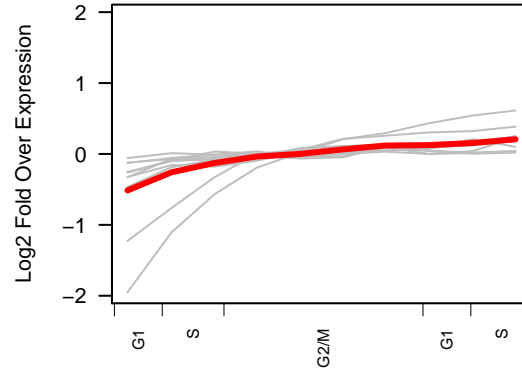
Centroids of clusters from Figure 3

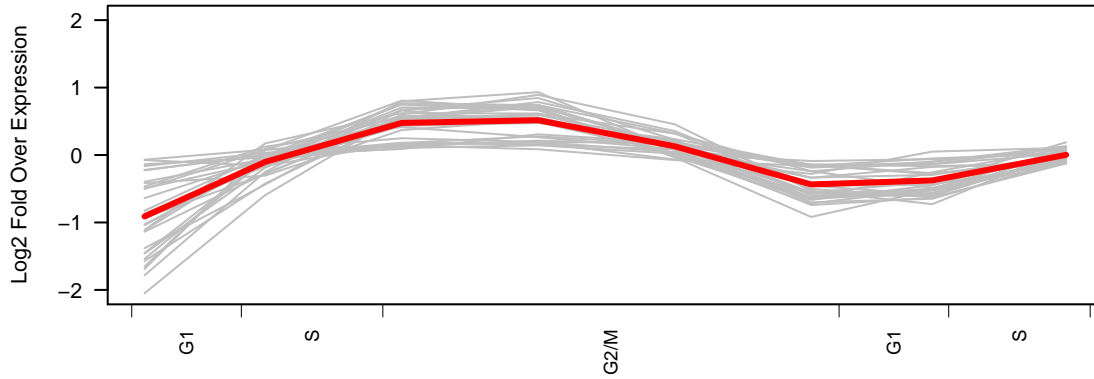**Wild−type Cluster − N**
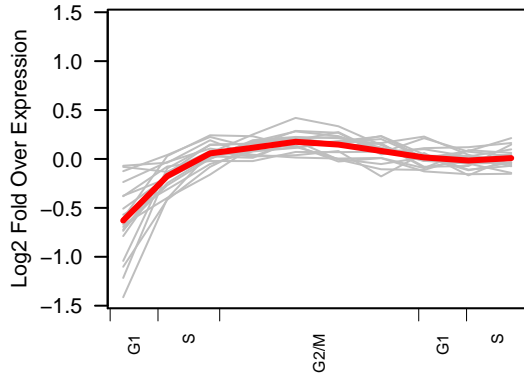Within cluster Pearson correlation − 0.835

Sub Clust. 29
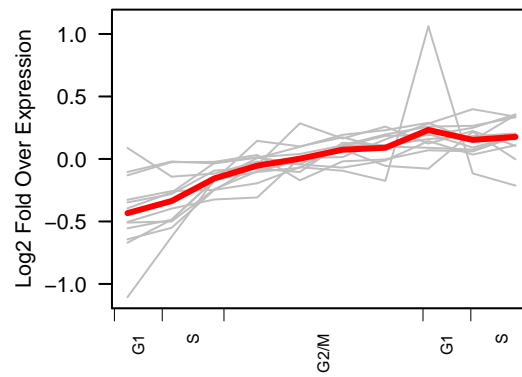0.784

Centroids of clusters from Figure 3

Wild−type Cluster − O
Within cluster Pearson correlation − 0.911

Log2 Fold Over Expression

G1   S   G2/M   G1   S

Sub Clust. 30
0.739

Log2 Fold Over Expression

G1   S   G2/M   G1   S

Sub Clust. 31
0.661

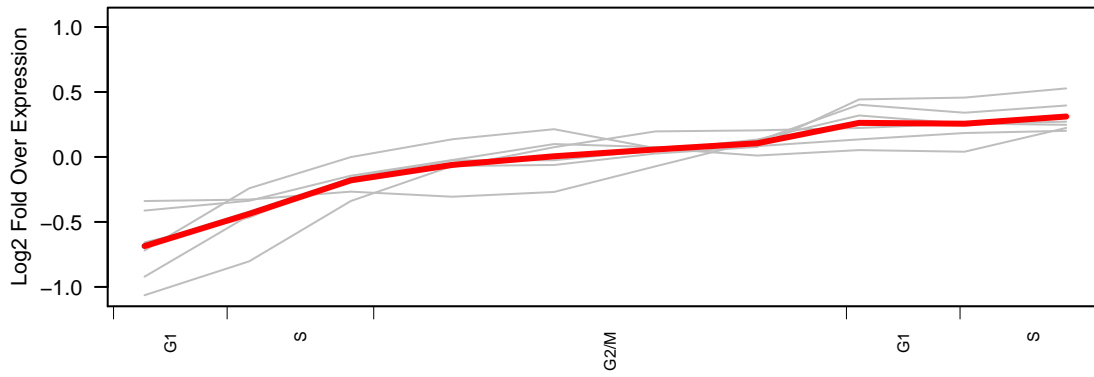Log2 Fold Over Expression

G1   S   G2/M   G1   S

Centroids of clusters from Figure 3

Wild−type Cluster − P
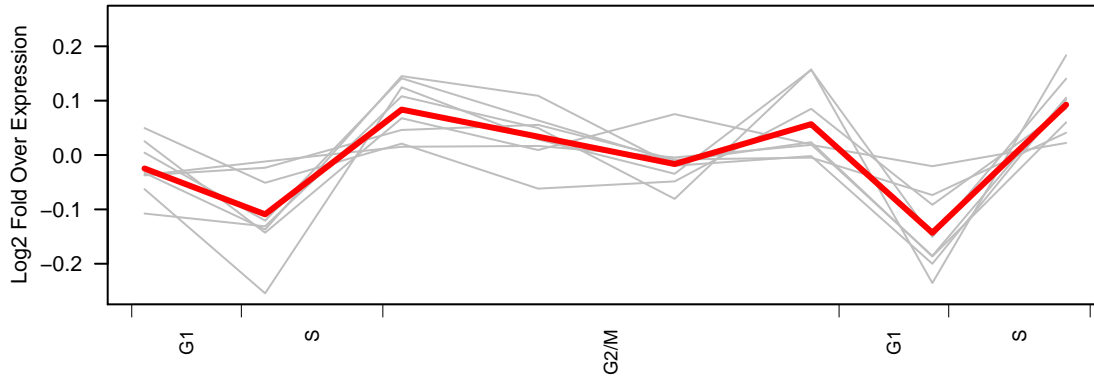Within cluster Pearson correlation − 0.778
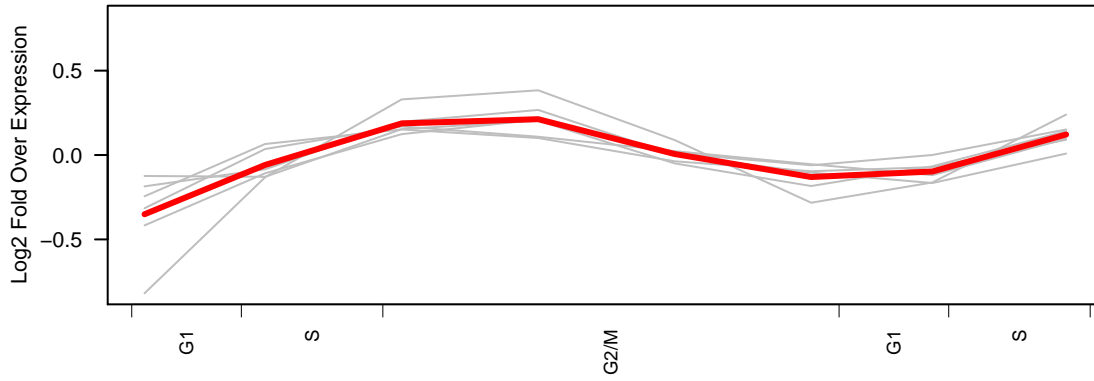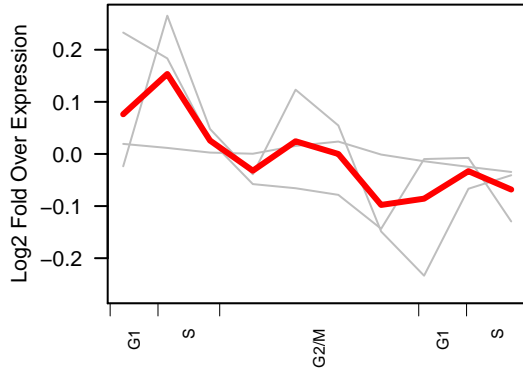
Sub Clust. 32
0.827
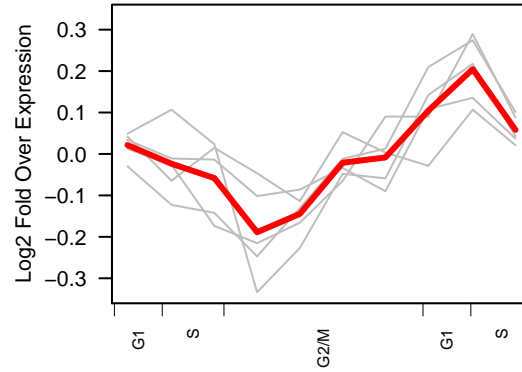
Centroids of clusters from Figure 3

Wild-type Cluster - Q

Within cluster Pearson correlation - 0.742
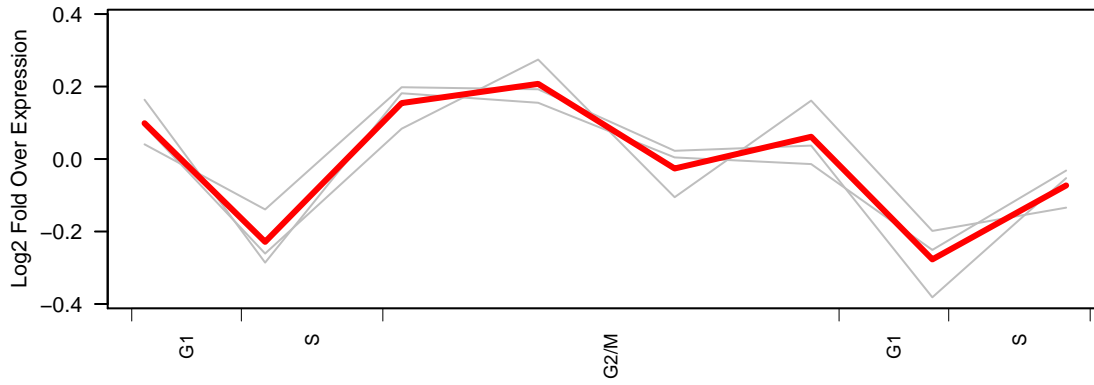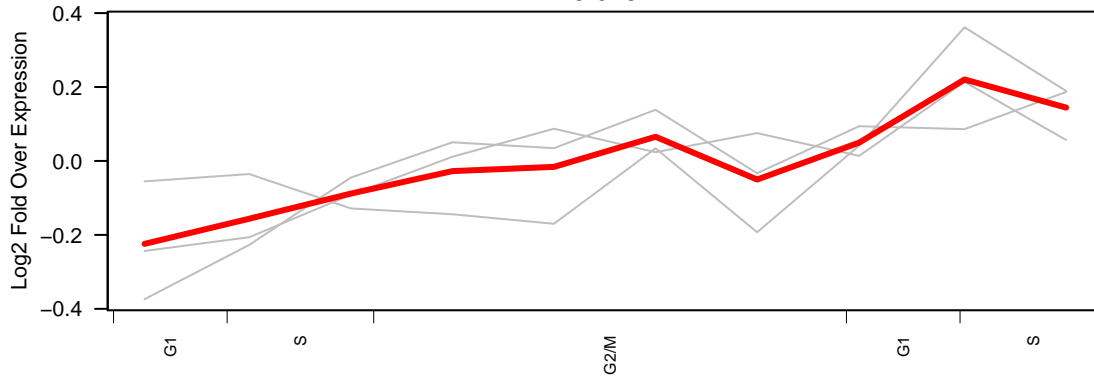
Sub Clust. 33
0.666

Sub Clust. 34
0.721

Centroids of clusters from Figure 3

Wild−type Cluster − R
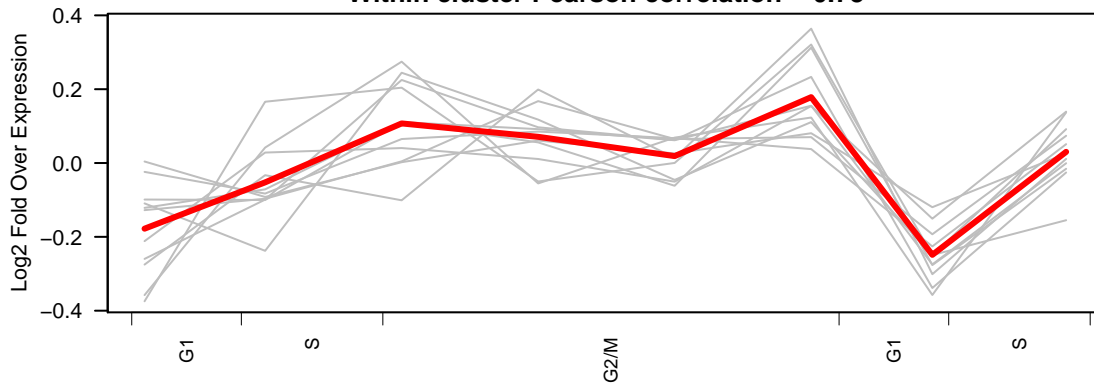## Within cluster Pearson correlation − 0.871

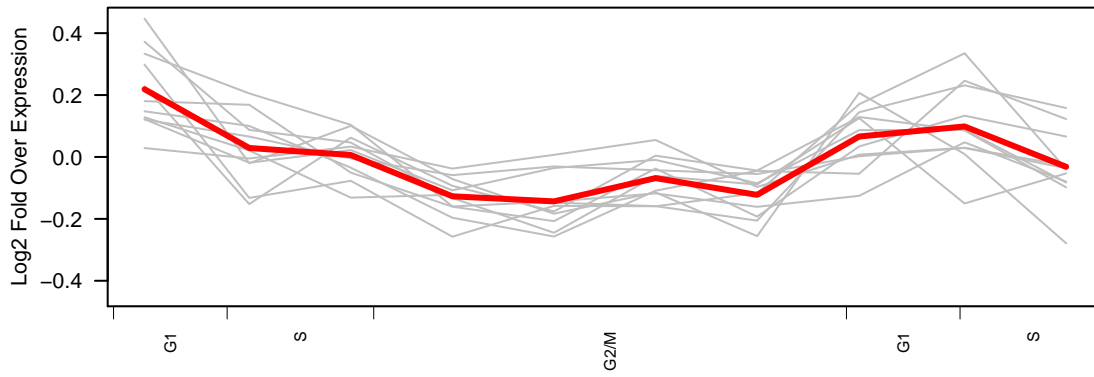# Sub Clust. 35
0.678

Centroids of clusters from Figure 3

Wild−type Cluster − S
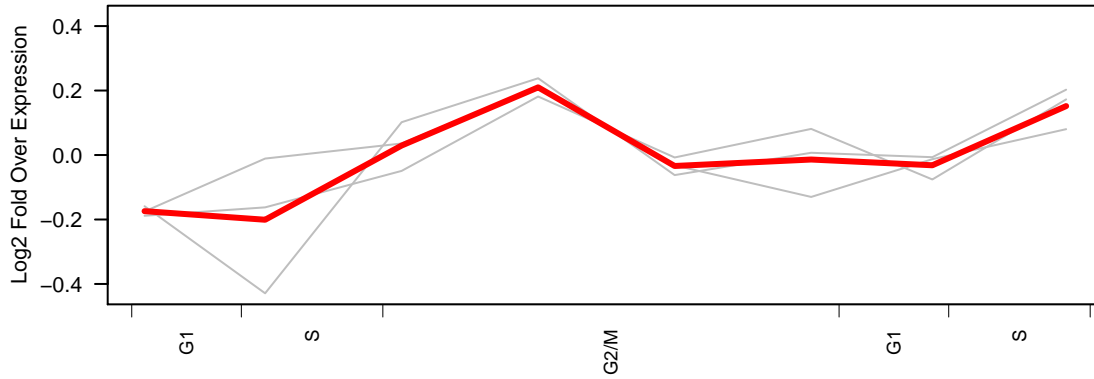Within cluster Pearson correlation − 0.73
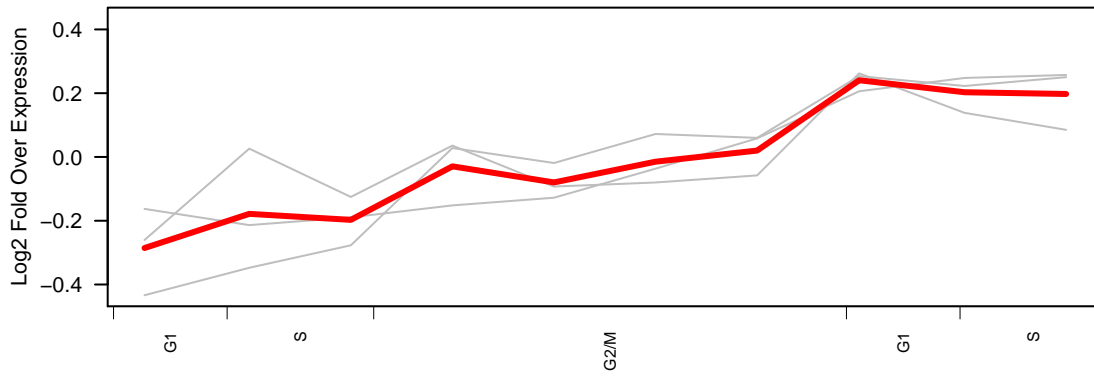
Sub Clust. 36
0.69

Centroids of clusters from Figure 3

Wild−type Cluster − T
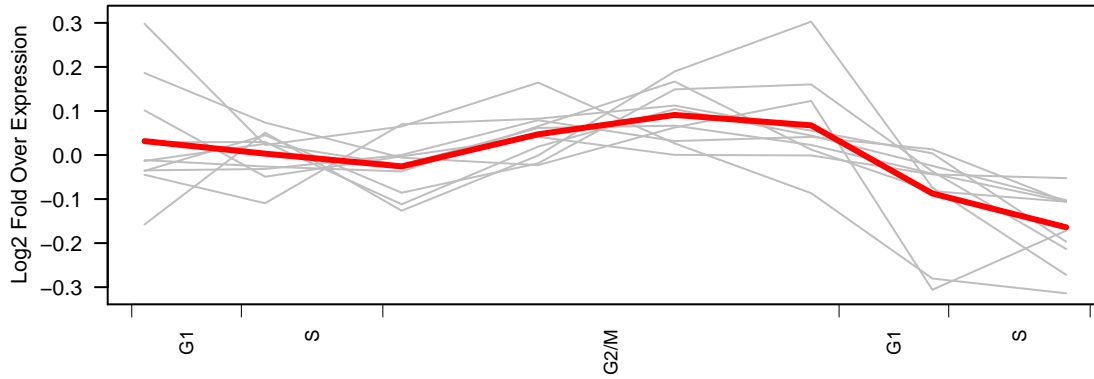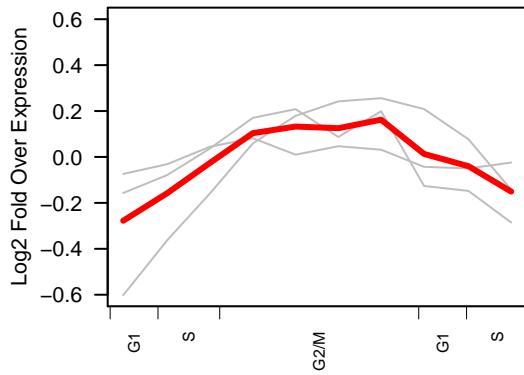Within cluster Pearson correlation − 0.674

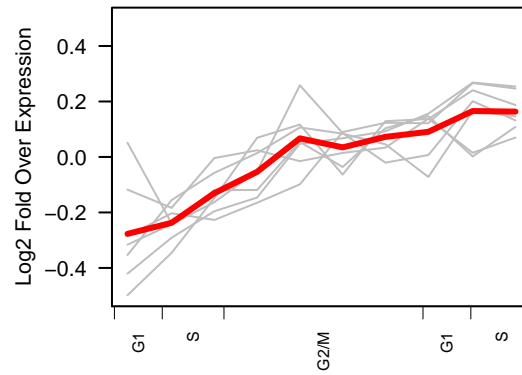**Sub Clust. 37**
0.848

Centroids of clusters from Figure 3

Wild–type Cluster – U
Within cluster Pearson correlation – 0.73
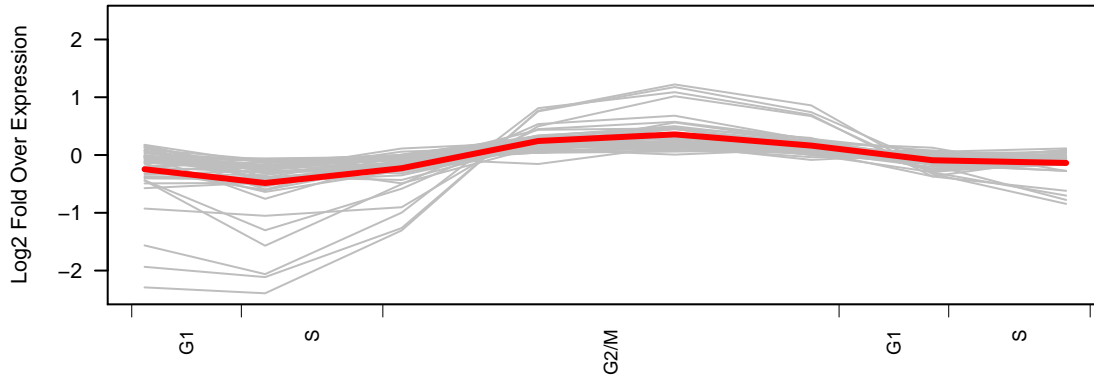
Sub Clust. 38
0.698

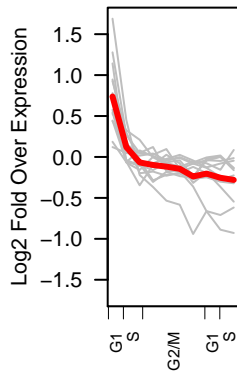## Sub Clust. 39
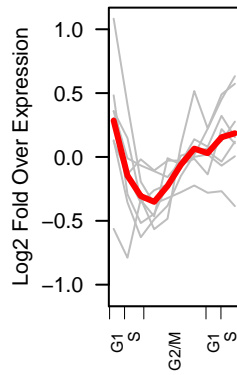### 0.829

Centroids of clusters from Figure 3

Wild−type Cluster − V
Within cluster Pearson correlation − 0.845

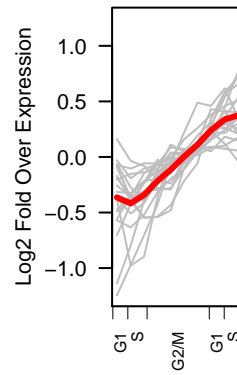

Sub Clust. 40
0.848

Sub Clust. 41
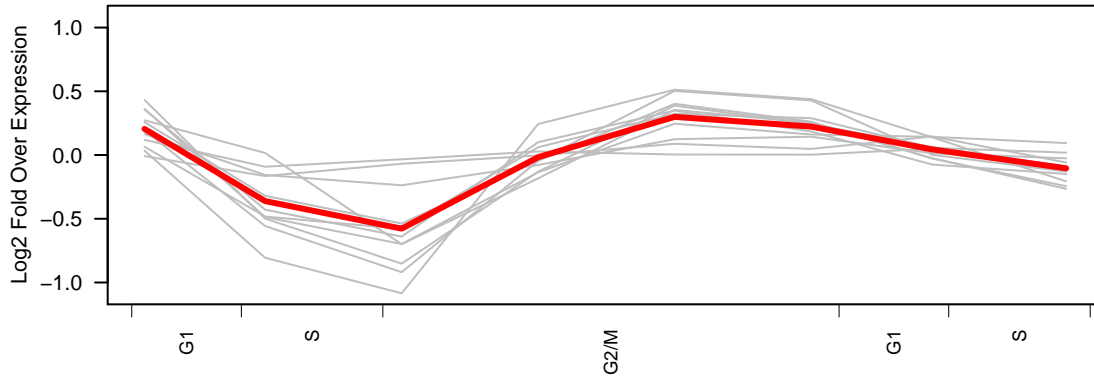### 0.669

Sub Clust. 42
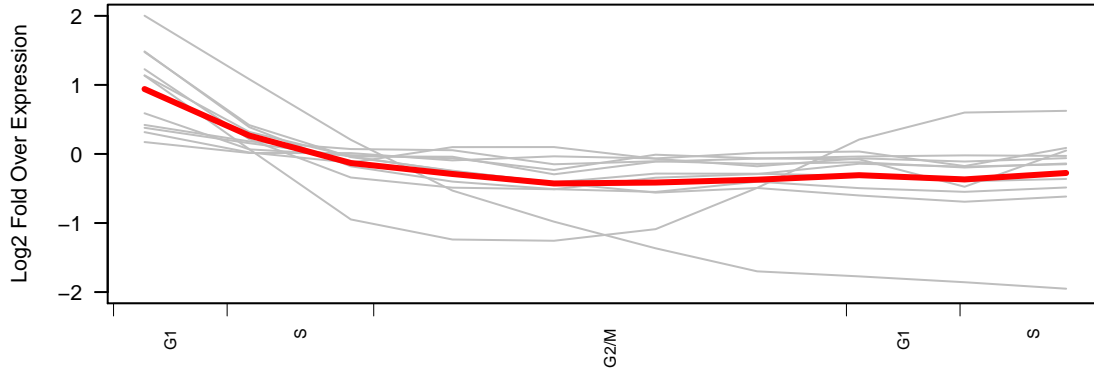### 0.872
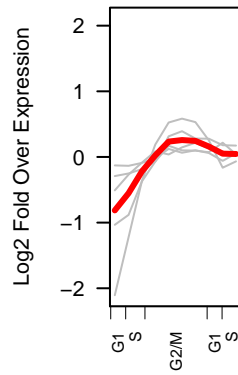
Sub Clust. 43
0.872

Centroids of clusters from Figure 3

Wild−type Cluster − W
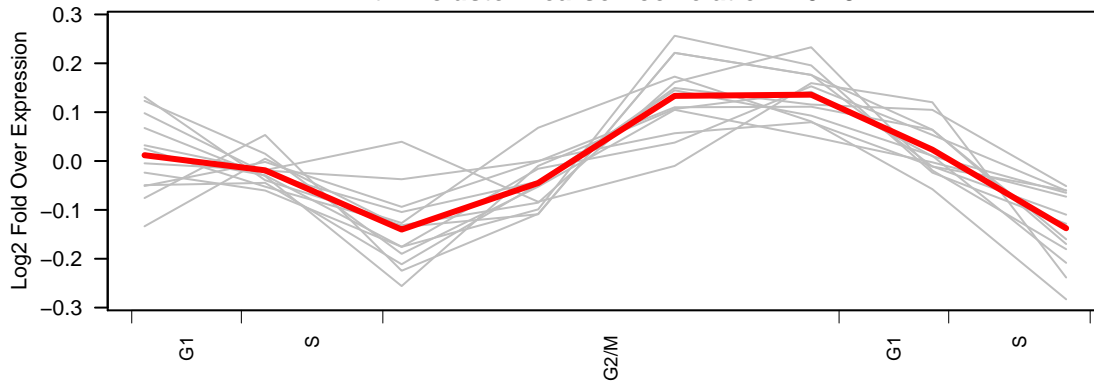Within cluster Pearson correlation − 0.869
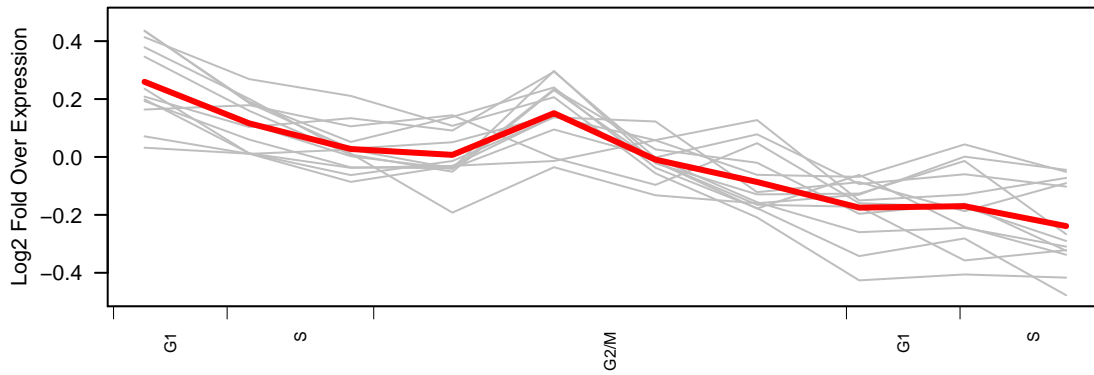
Sub Clust. 44
0.825

Centroids of clusters from Figure 3

Wild−type Cluster − X
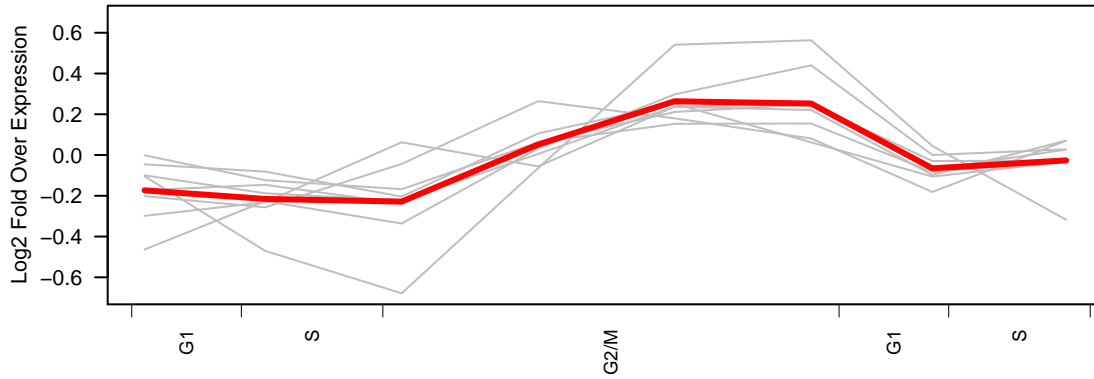Within cluster Pearson correlation − 0.794
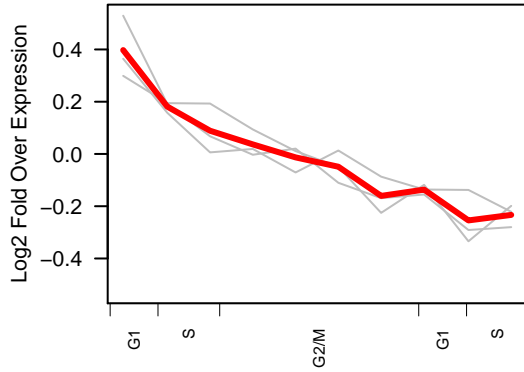
Sub Clust. 45
0.689
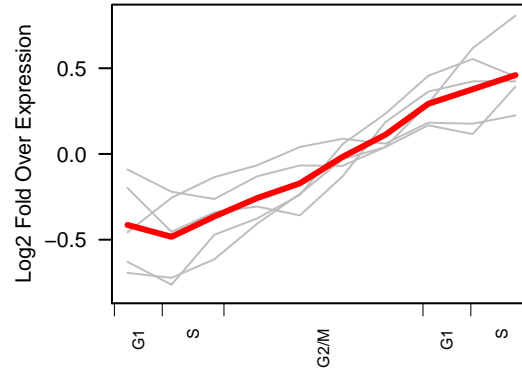
Centroids of clusters from Figure 3

Wild−type Cluster − Y
Within cluster Pearson correlation − 0.737
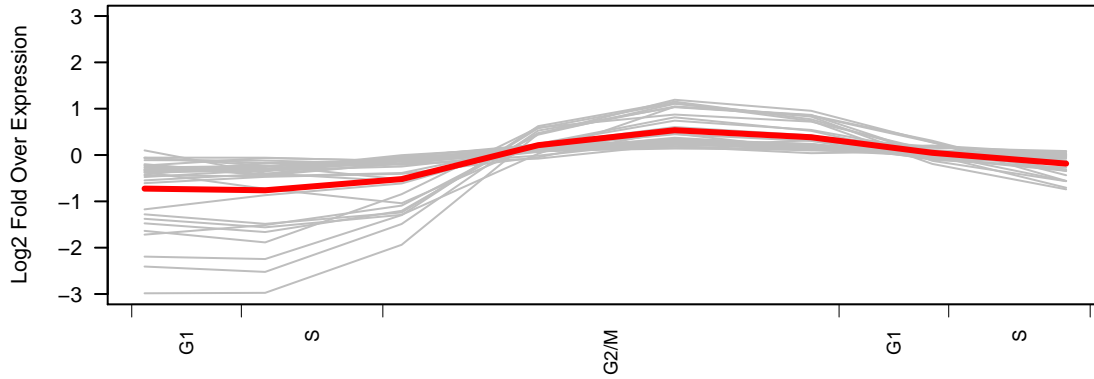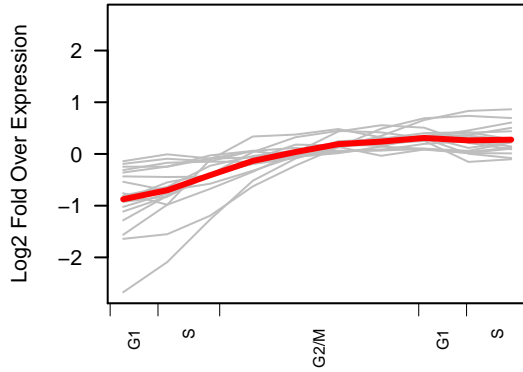
Sub Clust. 46
0.855

Sub Clust. 47
0.904
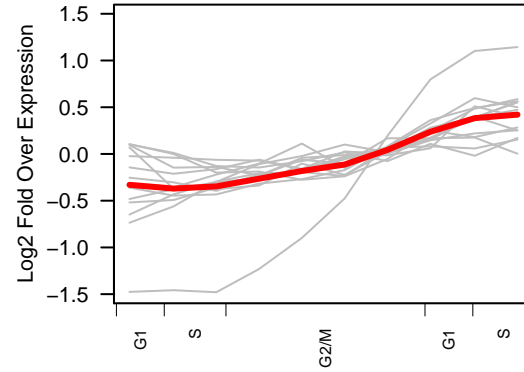
Centroids of clusters from Figure 3

Wild−type Cluster − Z
Within cluster Pearson correlation − 0.925

Log2 Fold Over Expression

G1　　S　　G2/M　　G1　　S

Sub Clust. 48
0.851

Log2 Fold Over Expression

G1　S　G2/M　G1　S

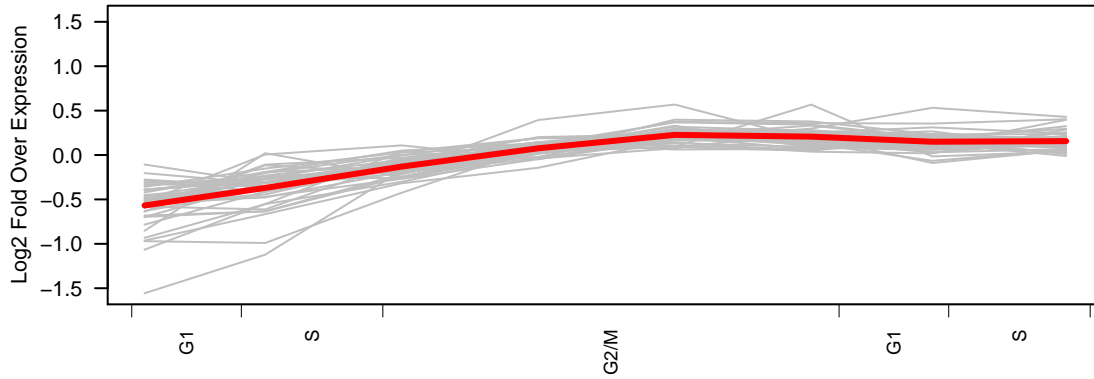## Sub Clust. 49
0.854

Log2 Fold Over Expression

G1　S　G2/M　G1　S
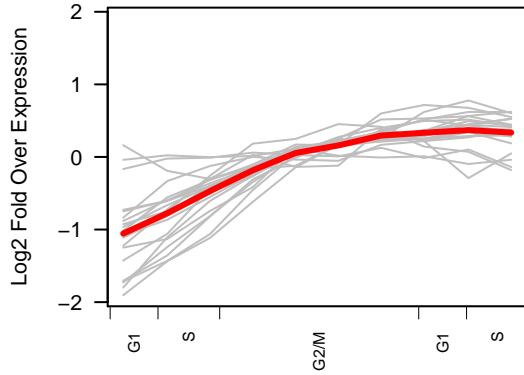
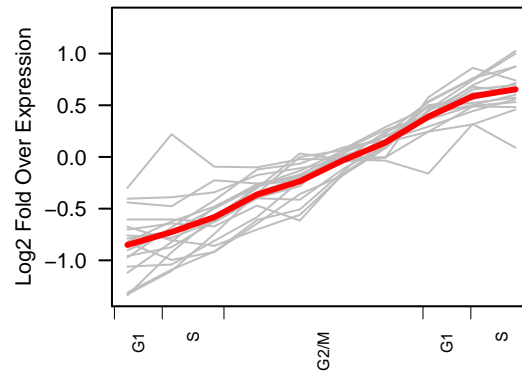Centroids of clusters from Figure 3

Wild–type Cluster – AA
Within cluster Pearson correlation – 0.868
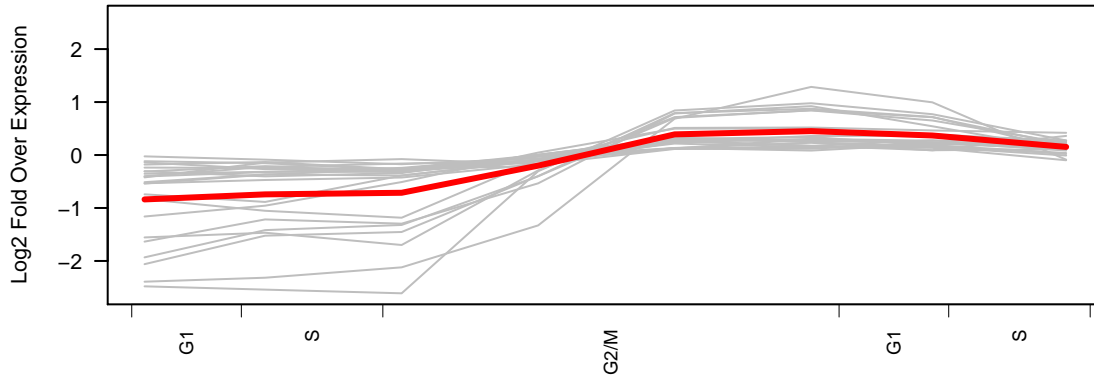
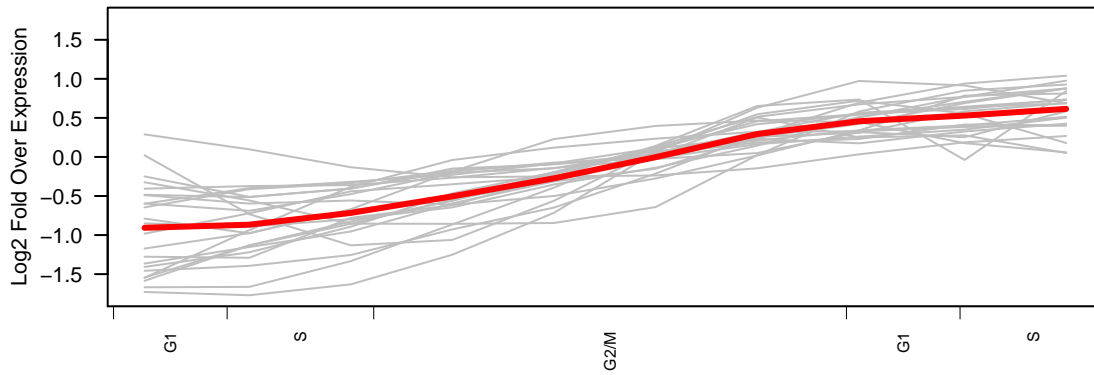**Sub Clust. 50**
0.806

Sub Clust. 51
0.932

Centroids of clusters from Figure 3

Wild–type Cluster – AB
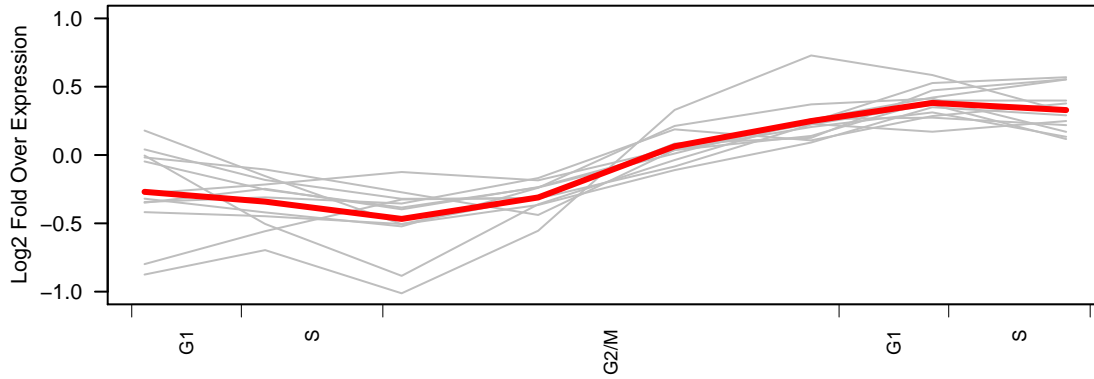Within cluster Pearson correlation – 0.931
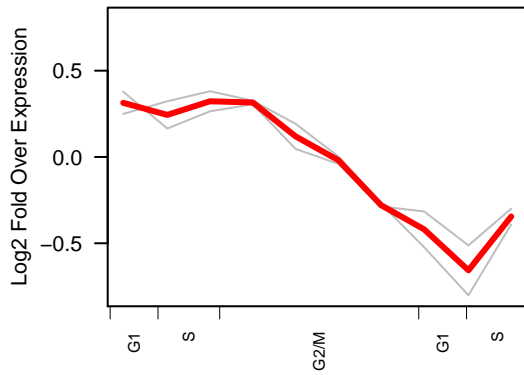
Sub Clust. 52
0.831
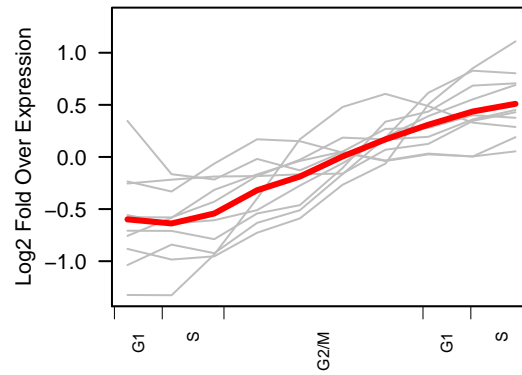
Centroids of clusters from Figure 3

Wild–type Cluster – AC
Within cluster Pearson correlation – 0.905
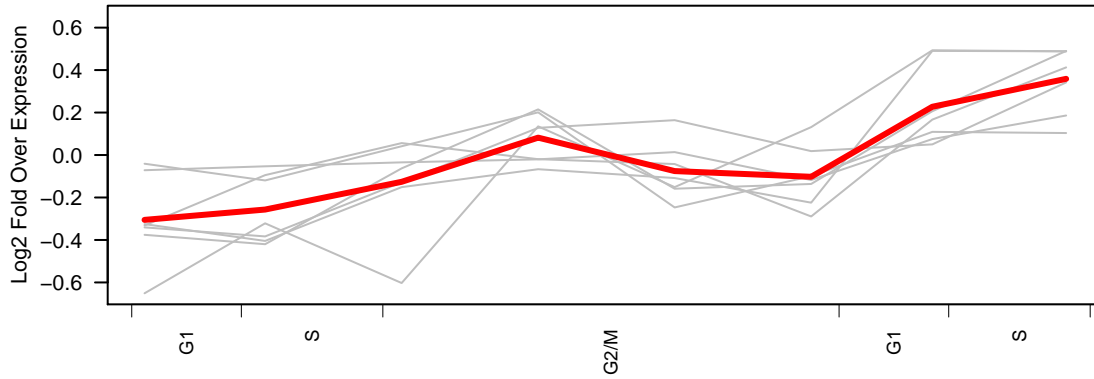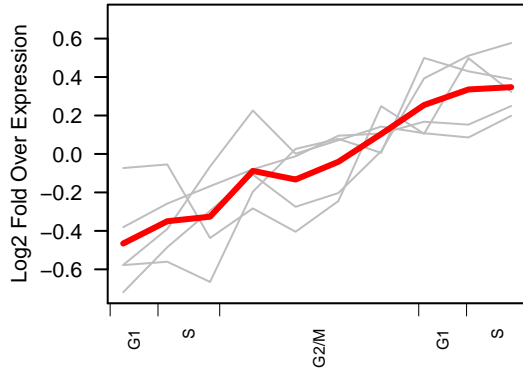
Sub Clust. 53
0.763

Sub Clust. 54
0.685

Centroids of clusters from Figure 3

Wild−type Cluster – AD
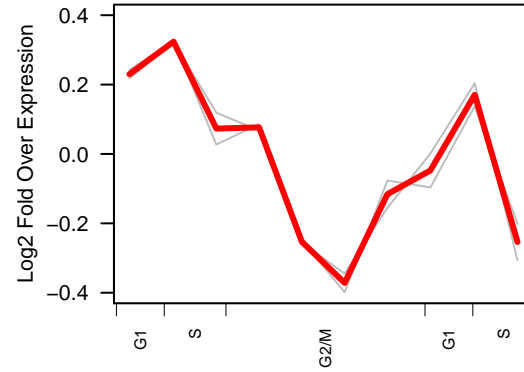## Within cluster Pearson correlation − 0.665

Sub Clust. 55
0.729

Sub Clust. 56
0.972

Centroids of clusters from Figure 3