Additional File 2: Table of conditional probabilities for output genes LACTB, ERMAP and CFL2 to be over-expressed given an upstream gene was under-expressed simultaneously.

| Output Processes | | Actin Linkage | Cytoskeletal Reorganization | Actin Stabilization | Average |
|------------------------|-----------|---------------|-----------------------------|---------------------|---------|
| Output Processes Genes | | ERMAP | LACTB | CFL2 | |
| | ARHGEF19 | 0.72 | 0.67 | 0.92 | 0.77 |
| | RAC2 | 0.72 | 0.67 | 0.92 | 0.77 |
| Upstream Genes | CDH1 | 0.71 | 0.67 | 0.92 | 0.767 |
| | GNG11 | 0.71 | 0.67 | 0.92 | 0.767 |
| | RTKN | 0.71 | 0.67 | 0.92 | 0.767 |
| | ECM1 | 0.71 | 0.67 | 0.92 | 0.767 |
| | ITGB2 | 0.71 | 0.67 | 0.92 | 0.767 |
| | GNA11 | 0.71 | 0.67 | 0.92 | 0.767 |
| | GPRC5A | 0.71 | 0.67 | 0.92 | 0.767 |
| | PAK2 | 0.71 | 0.67 | 0.92 | 0.767 |
| | ERMP1 | 0.71 | 0.67 | 0.92 | 0.767 |
| | CDC42-IT1 | 0.71 | 0.67 | 0.92 | 0.767 |
| | DGKZ | 0.71 | 0.67 | 0.92 | 0.767 |
| | DAGLB | 0.71 | 0.67 | 0.92 | 0.767 |
| | PAAF1 | 0.71 | 0.67 | 0.92 | 0.767 |
| | PIP | 0.71 | 0.67 | 0.92 | 0.767 |
| | ARHGAP6 | 0.70 | 0.67 | 0.92 | 0.763 |
| | PIP5K1B | 0.70 | 0.67 | 0.92 | 0.763 |
| | PAK1 | 0.71 | 0.67 | 0.91 | 0.763 |
| | DCL1 | 0.69 | 0.67 | 0.92 | 0.760 |
| | PIP4K2A | 0.68 | 0.66 | 0.92 | 0.753 |
| | LIMK2 | 0.69 | 0.67 | 0.86 | 0.740 |
| | CD44 | 0.57 | 0.66 | 0.92 | 0.717 |
| | ROCK2 | 0.57 | 0.66 | 0.89 | 0.707 |
| | RHOJ | 0.22 | 0.63 | 0.89 | 0.580 |