**Table S6**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Without BG subtraction | | | | | | |
| VCA |  | **EM 1** | **EM 2** | **EM 3** | **EM 4** | **EM 5** | **EM 6** |
| EM 1 | VCA | 1.000 |  |  |  |  |  |
| NMF | 0.819 | 0.626 | 0.073 | 0.339 | 0.326 | -0.354 |
| MCR no PCA | 0.823 | 0.540 | 0.738 | 0.533 | 0.375 | -0.484 |
| MCR with PCA | 0.795 | 0.531 | 0.259 | 0.354 | 0.228 | -0.442 |
| EM 2 | VCA |  | 1.000 |  |  |  |  |
| NMF | 0.756 | 0.870 | 0.013 | 0.228 | 0.458 | -0.674 |
| MCR no PCA | 0.788 | 0.793 | 0.625 | 0.586 | 0.558 | -0.738 |
| MCR with PCA | 0.739 | 0.808 | 0.173 | 0.424 | 0.379 | -0.682 |
| EM 3 | VCA |  |  | 1.000 |  |  |  |
| NMF | 0.798 | 0.614 | 0.221 | 0.493 | 0.313 | -0.345 |
| MCR no PCA | 0.792 | 0.467 | 0.751 | 0.656 | 0.402 | -0.487 |
| MCR with PCA | 0.750 | 0.467 | 0.326 | 0.499 | 0.262 | -0.450 |
| EM 4 | VCA |  |  |  | 1.000 |  |  |
| NMF | 0.572 | 0.305 | 0.370 | 0.691 | 0.144 | -0.021 |
| MCR no PCA | 0.552 | 0.086 | 0.581 | 0.659 | 0.242 | -0.220 |
| MCR with PCA | 0.521 | 0.094 | 0.279 | 0.578 | 0.167 | -0.208 |
| EM 5 | VCA |  |  |  |  | 1.000 |  |
| NMF | 0.551 | 0.663 | 0.248 | 0.300 | 0.710 | -0.700 |
| MCR no PCA | 0.617 | 0.541 | 0.438 | 0.680 | 0.833 | -0.885 |
| MCR with PCA | 0.562 | 0.593 | 0.070 | 0.623 | 0.730 | -0.874 |
| EM 6 | VCA |  |  |  |  |  | 1.000 |
| NMF | -0.348 | -0.803 | -0.014 | 0.060 | -0.519 | 0.980 |
| MCR no PCA | -0.399 | -0.778 | -0.229 | -0.420 | -0.641 | 0.856 |
| MCR with PCA | -0.332 | -0.820 | -0.0587 | -0.3565 | -0.509 | 0.812 |