

Vignette1 - Introduction & Main

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Part 1: Interpreting Global Scores

MCIA calculates a global scores matrix that is $n \times k$ where n is the number of samples and k is the number of factors. Each entry M_{ik} represents the strength of factor k to sample i . As such, you may be interested in further dissecting the global scores matrix in order to understand, for a given sample, what factors capture the most the MCIA decomposition. . . . (tbd)

Part 2: Interpreting Global Loadings

In addition to the global scores matrix, MCIA also calculates a global loadings matrix that is $(m_1 + \dots + m_j + \dots + m_R) \times k$ where m_j is the number of features within the omics matrix X^j and K is the number of factors calculated. This second matrix provides information as to the contribution

```
data(NCI60)
names(data_blocks)
```

```
## [1] "mrna" "miRNA" "prot"
```