

# Supplement : Tight clustering for large datasets with an application to gene expression data

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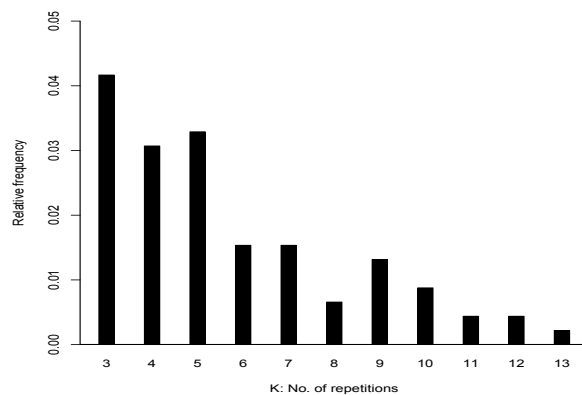


Figure S1: Frequency distribution of maximum two Rand Indices over repetitions.

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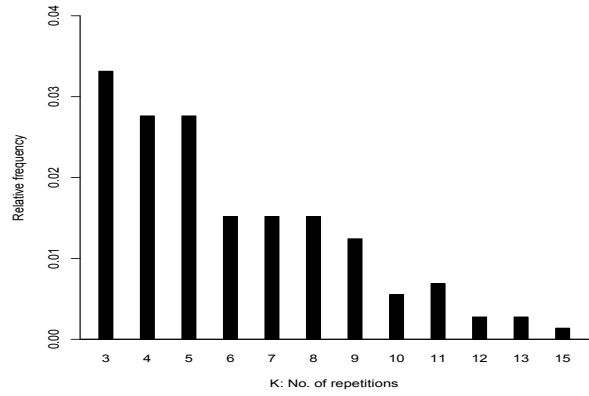


Figure S2: Frequency distribution of maximum three Rand Indices over repetitions.

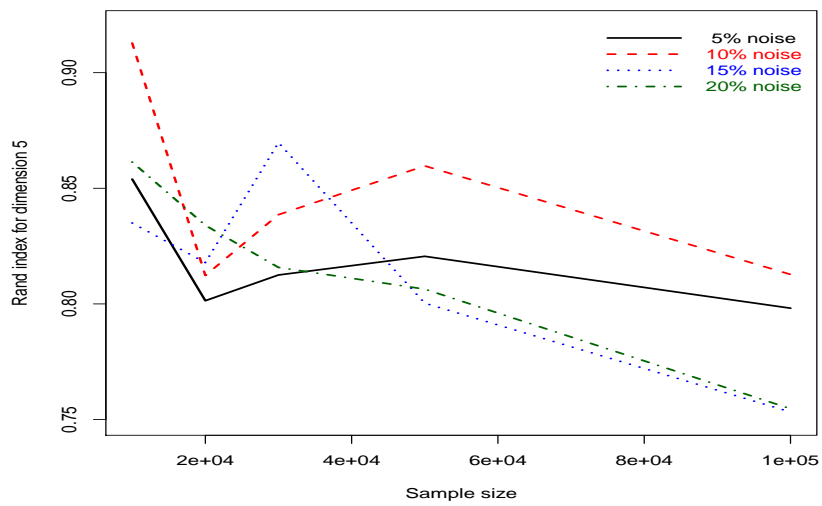


Figure S3: Rand Index plot for different sample sizes varied over noise levels for fixed dimension 5.

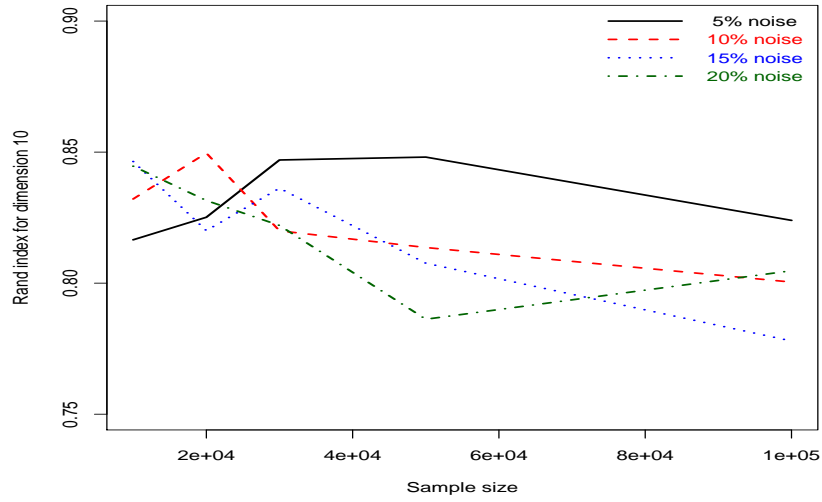


Figure S4: Rand Index plot for different sample sizes varied over noise levels for fixed dimension 10.

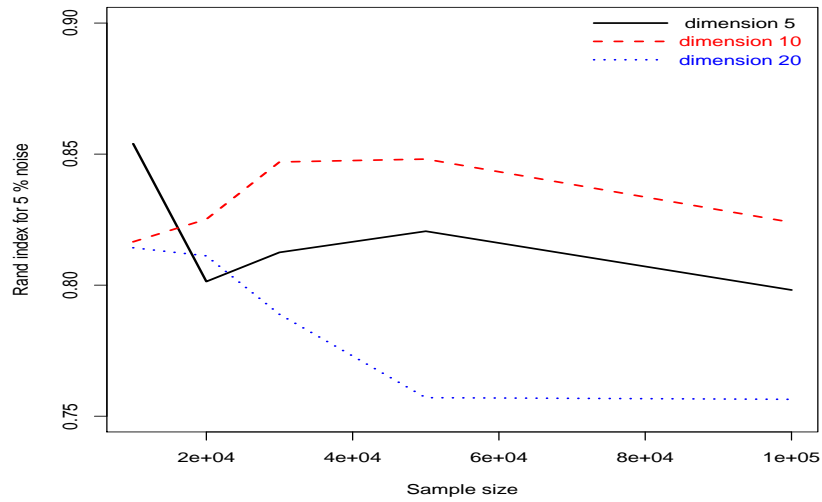


Figure S5: Rand Index plot for different sample sizes varied over dimension for noise level 5%.

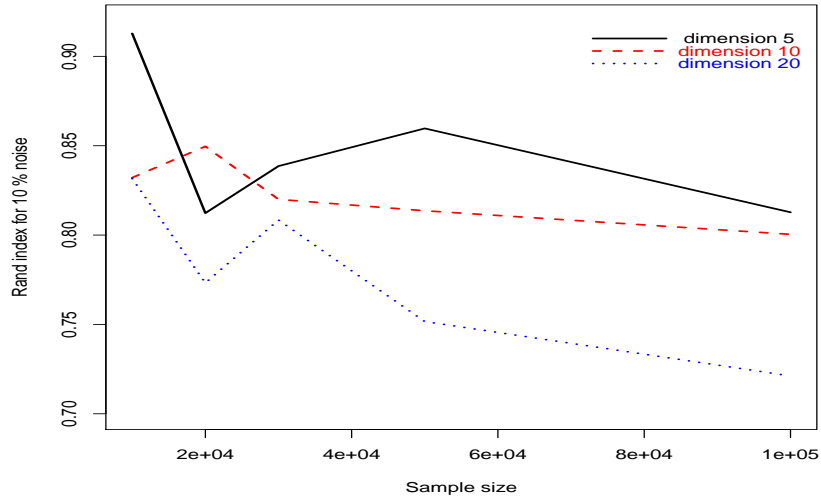


Figure S6: Rand Index plot for different sample sizes varied over dimension for noise level 10%.

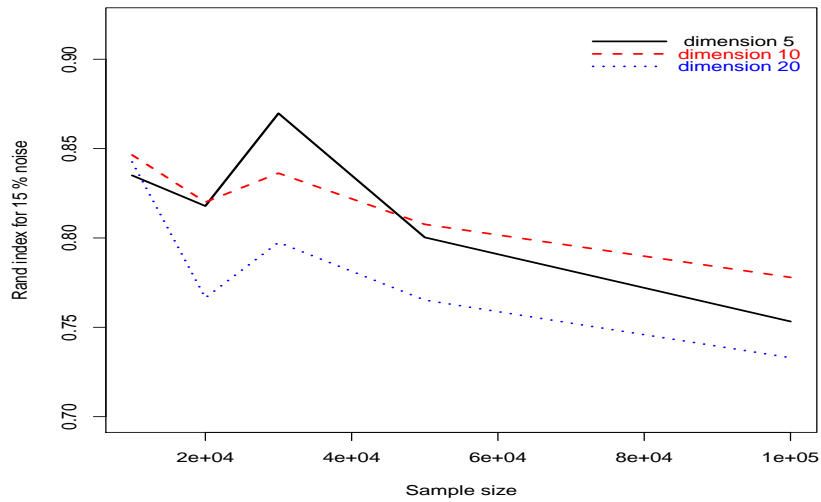


Figure S7: Rand Index plot for different sample sizes varied over dimension for noise level 15%.

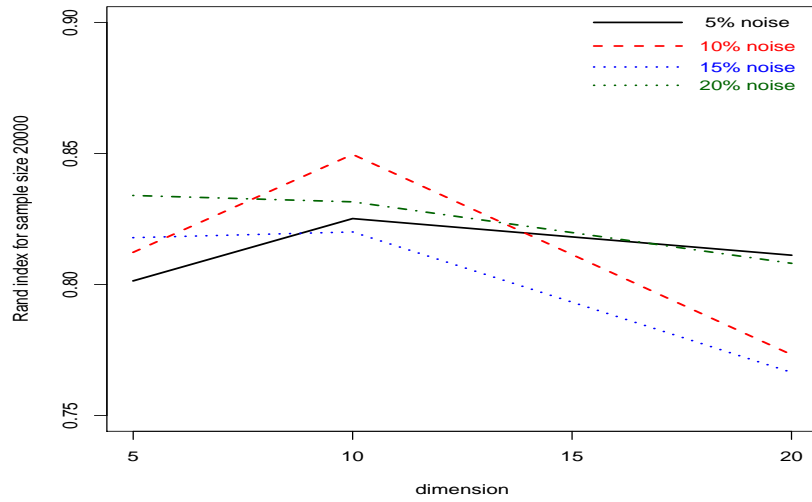


Figure S8: Rand Index plot for different dimensions varied over noise levels for sample size 20000.

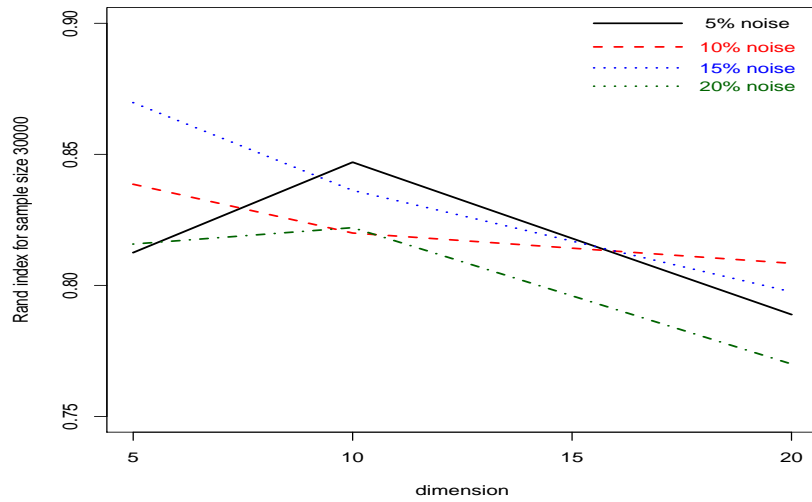


Figure S9: Rand Index plot for different dimensions varied over noise levels for sample size 30000.

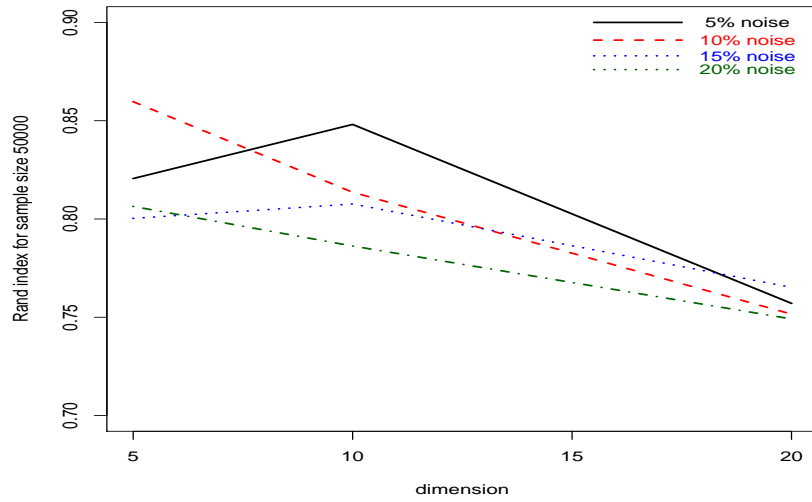


Figure S10: Rand Index plot for different dimensions varied over noise levels for sample size 50000.

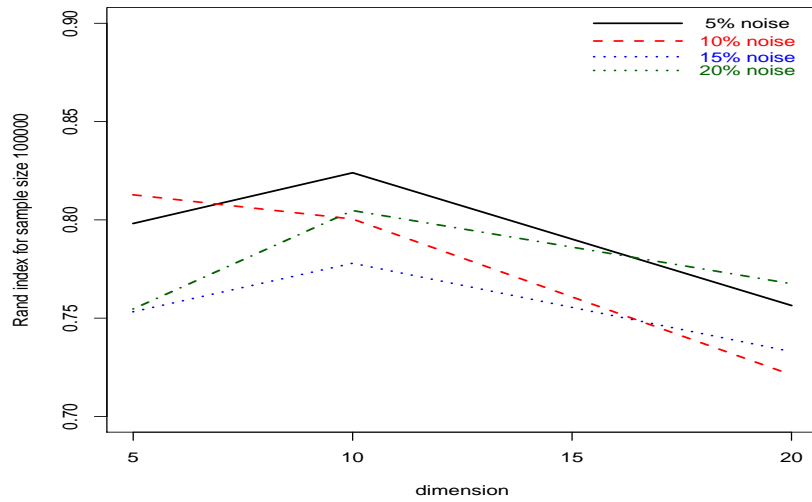


Figure S11: Rand Index plot for different dimensions varied over noise levels for sample size 100000.

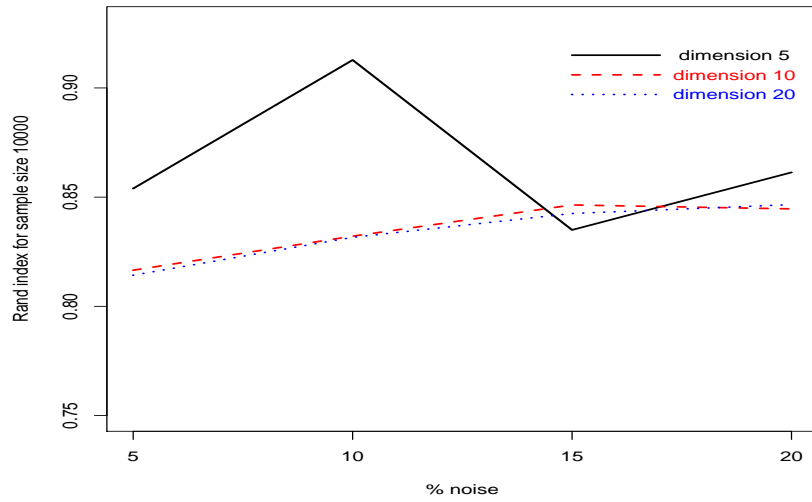


Figure S12: Rand Index plot for different noise levels varied over dimensions for sample size 10000.

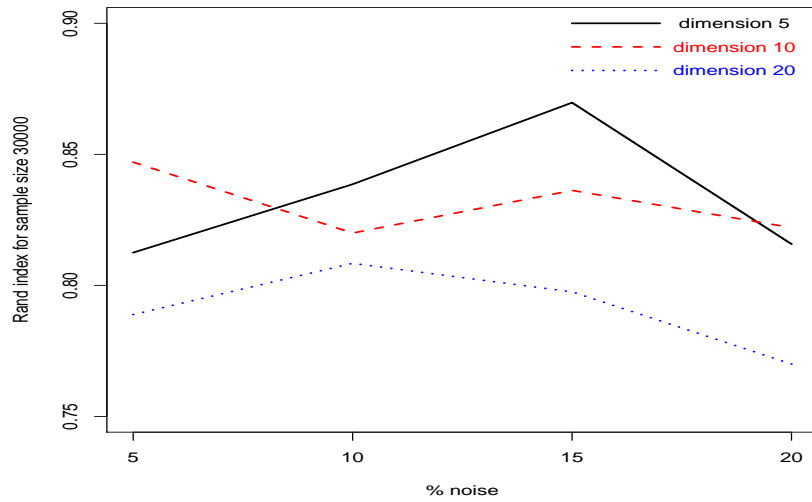


Figure S13: Rand Index plot for different noise levels varied over dimensions for sample size 30000.

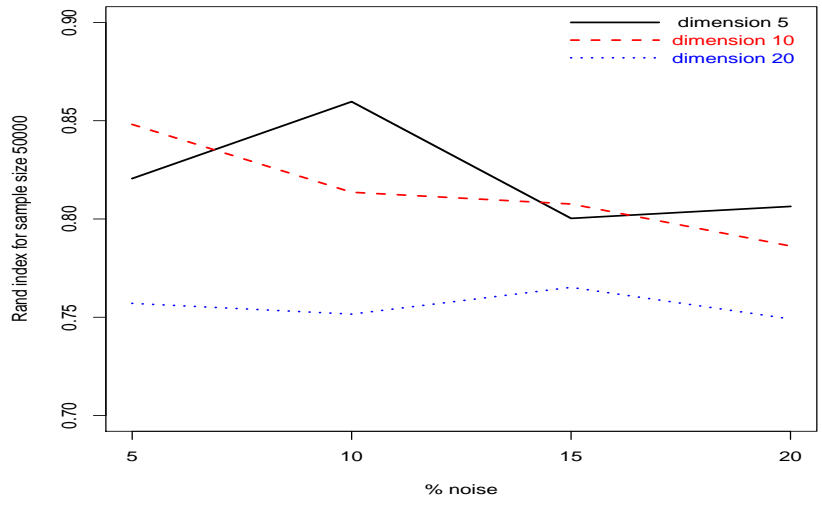


Figure S14: Rand Index plot for different noise levels varied over dimensions for sample size 50000.

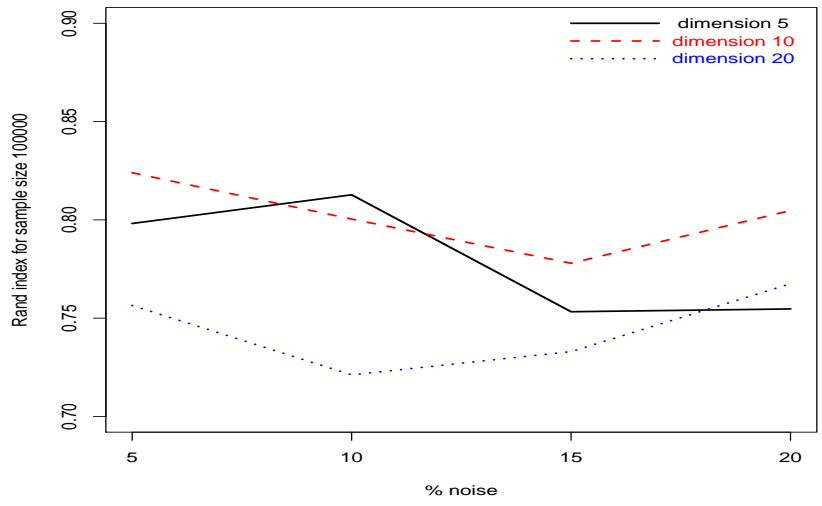


Figure S15: Rand Index plot for different noise levels varied over dimensions for sample size 100000.



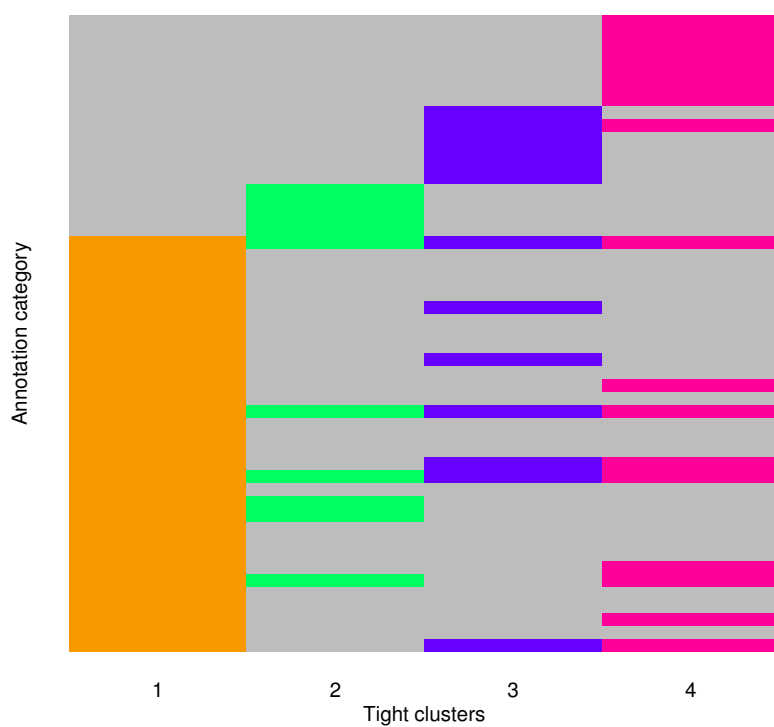


Figure S16: Functional annotations of the clusters detected from tight clustering algorithm (with  $k = 4$ ).

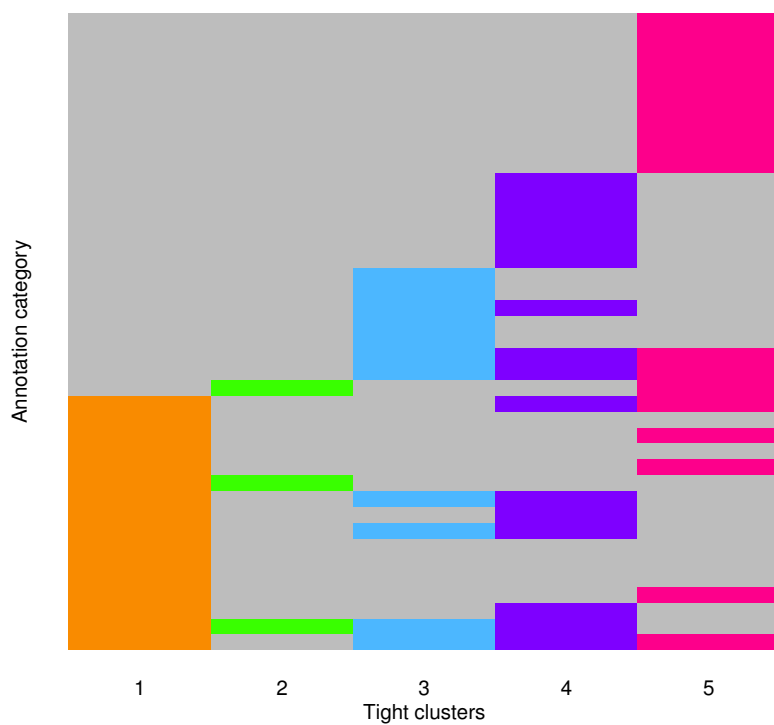


Figure S17: Functional annotations of the clusters detected from tight clustering algorithm (with  $k = 5$ ).