(1) Map expression profiles to the causal network

(2) Calculate Pearson correlation coefficients between regulatees

(3) Applying target function to evaluate the coherence of regulatees

1. Mean \[ \mu_R = \left( \frac{2}{n(n-1)} \right) \sum_{i=1}^{n-1} \sum_{j=i+1}^{n} |\text{cor}(x_{Ri}, x_{Rj})| \]

2. Ratio \[ F_R = \frac{2c}{n(n-1)} \]

(4) Calculate p-value by permutation test

(5) Benjamini and Hochberg FDR correction

(6) Report significant regulators with FDR < 0.05 and visualize regulatory subnetwork