



Supplementary Figure 2. Comparisons between the empirical and the fitted mixture of Delta, Uniform and Gamma distributions.

(a) **Upper panel** shows empirical cumulative distribution function (CDF) for MRF (in blue) and the corresponding CDF for the fitted mixture model (in red).

(a) **Lower panel** shows empirical output score for MRF (in blue) and the corresponding output score for the fitted mixture model (in red).

(b) **Upper panel** shows empirical CDF for MEF2 (in blue) and the corresponding CDF for the fitted mixture model (in red).

(b) **Lower panel** shows empirical output score for MEF2 (in blue) and the corresponding output score for the fitted mixture model (in red);

(c) **Upper panel** shows empirical CDF for SRF (in blue) and the corresponding CDF for the fitted mixture model (in red).

(c) **Lower panel** shows empirical output score for SRF (in blue) and the corresponding output score for the fitted mixture model (in red).

(d) **Upper panel** shows empirical CDF for TEAD (in blue) and the corresponding CDF for the fitted mixture model (in red).

(d) **Lower panel** shows empirical output score for TEAD (in blue) and the corresponding output score for the fitted mixture model (in red).