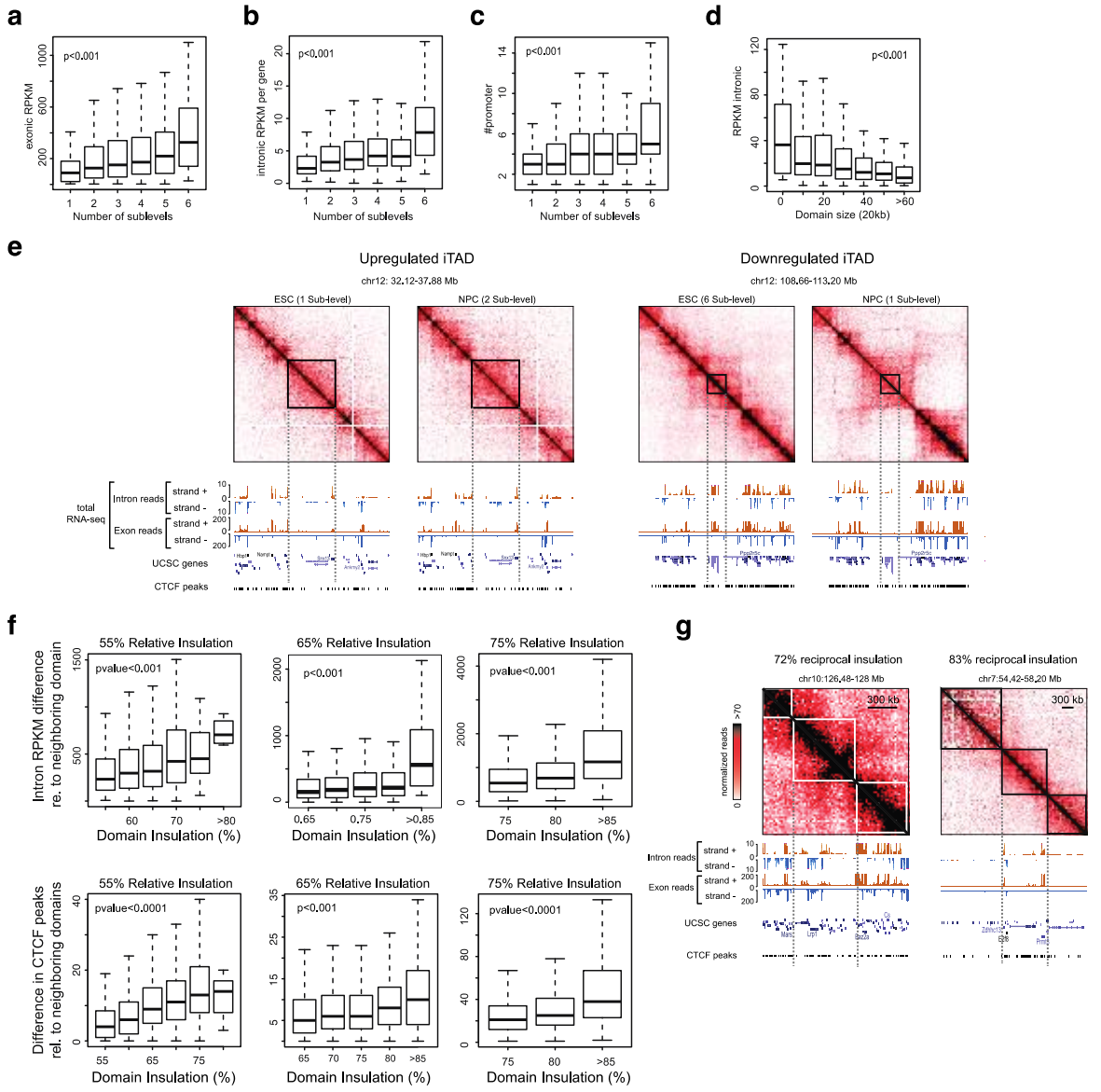

Supplemental Figure S5.

a. The number of sub-levels of a domain correlates with the average transcriptional activity measured by exonic RPKM (shown here for TADs).

b. Same as in a but using intronic RPKM per gene.

c. The number of sub-levels of a domain correlates with the number of active promoters within the domain (shown for iTADs). p-value: t-test associated to Spearman correlation.

d. More active domains are smaller than inactive domains (shown here for TADs at 65% RI), measured by intronic RPKM. p-value: t-test associated to Spearman correlation.

e. Example of domains (highlighted by black squares) where transcription and number of sub-levels increase (left) or decrease (right) during differentiation.

f. The absolute value of the reciprocal insulation of a domain correlates with the level of changes in expression level (upper panels) and in the number of CTCF peaks (lower panels) with the adjacent domains (shown for domains at 55% RI (left panels), 65% RI (middle panels) and 75% RI (right panels)).

g. Example of domains at 65% RI that are highly (right) or lowly (left) insulated from neighboring domains, and have dissimilar or similar transcriptional levels and number of CTCF peaks, respectively, compared to neighboring domains.