

Supplementary information associated with

Barriers to Transmission of Transcriptional Noise in a c-fos c-jun Pathway

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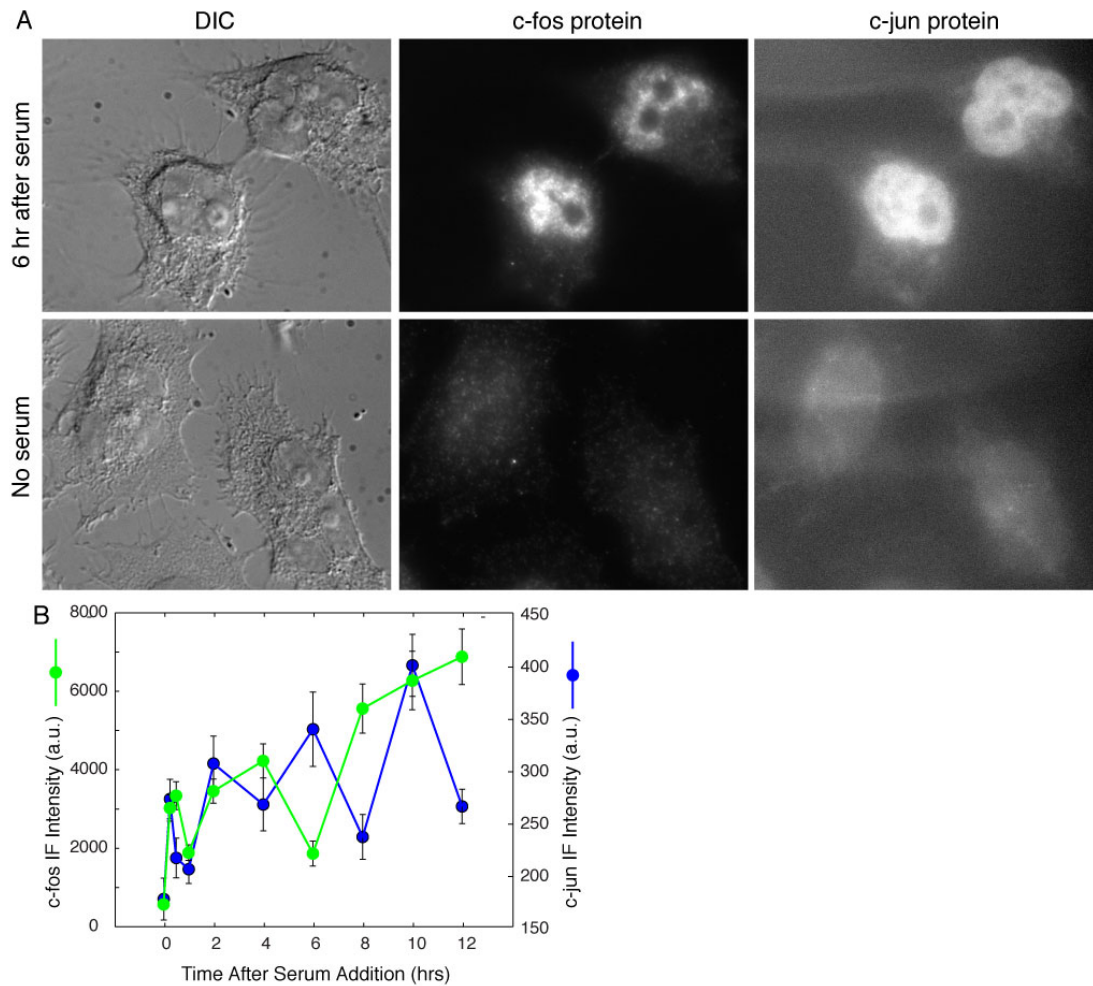


Fig. S1. Imaging c-fos and c-jun proteins in single cells by Immunofluorescence (IF). **A.** A mouse antibody specific for c-fos and a rabbit antibody specific for c-jun were used to probe HeLa cells with and without serum induction. The primary antibodies were detected using species-specific secondary antibodies labeled with distinguishable fluorophores. **B.** Fluorescence intensities integrated over the area of nucleus as a function of time after serum addition. The error bars represent 95% CI.

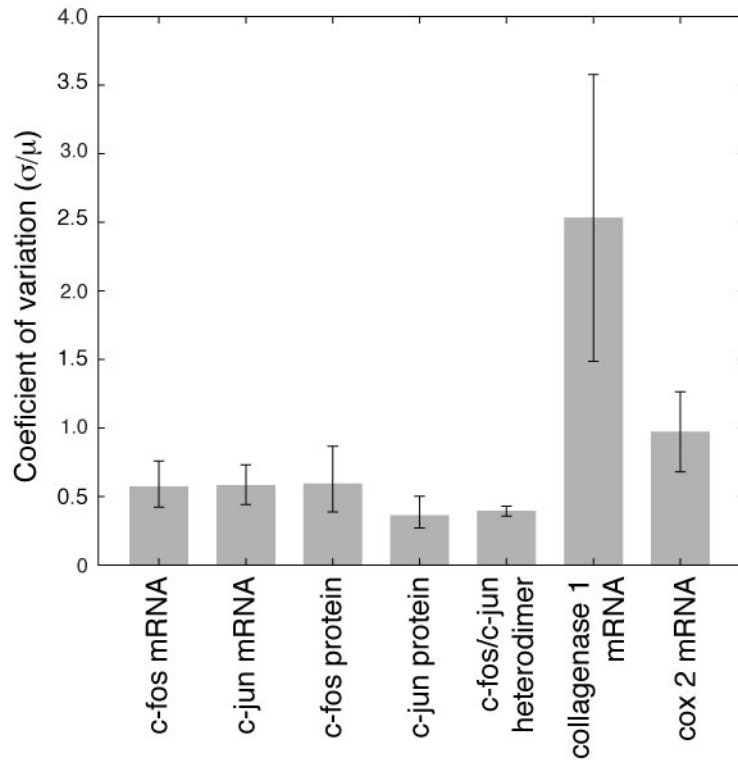


Fig. S2. Cell-to-cell variation (coefficient of variation, standard deviation/mean) in different species in the c-fos/c-jun pathway. The data for c-fos and c-jun mRNAs is from cells at 30 min after serum addition and for the other species it is 6 hr after serum addition. The error bars represent 95% CI.

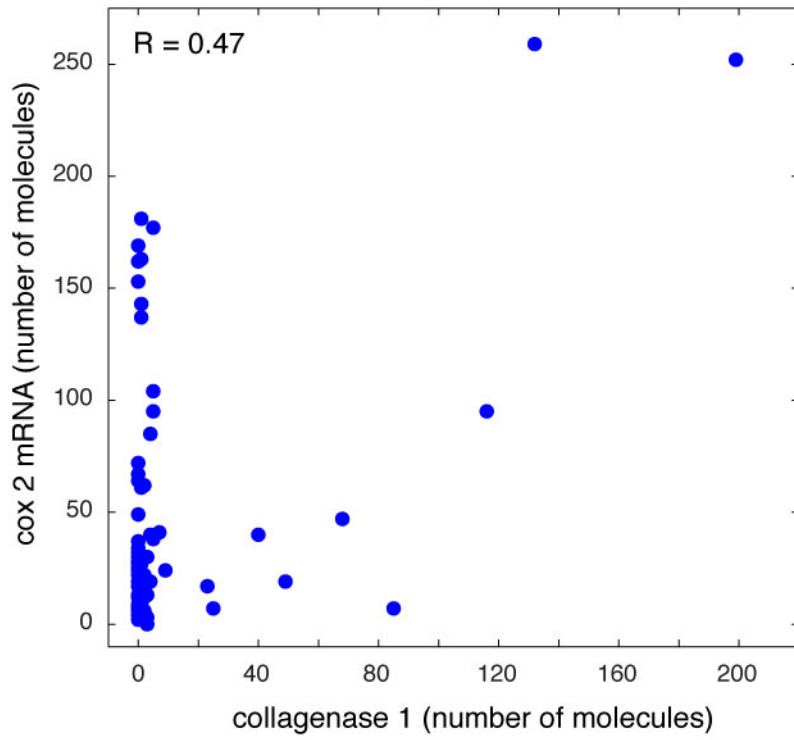


Fig. S3. Correlation between two downstream mRNAs in the same cells at 6 hr after serum addition.

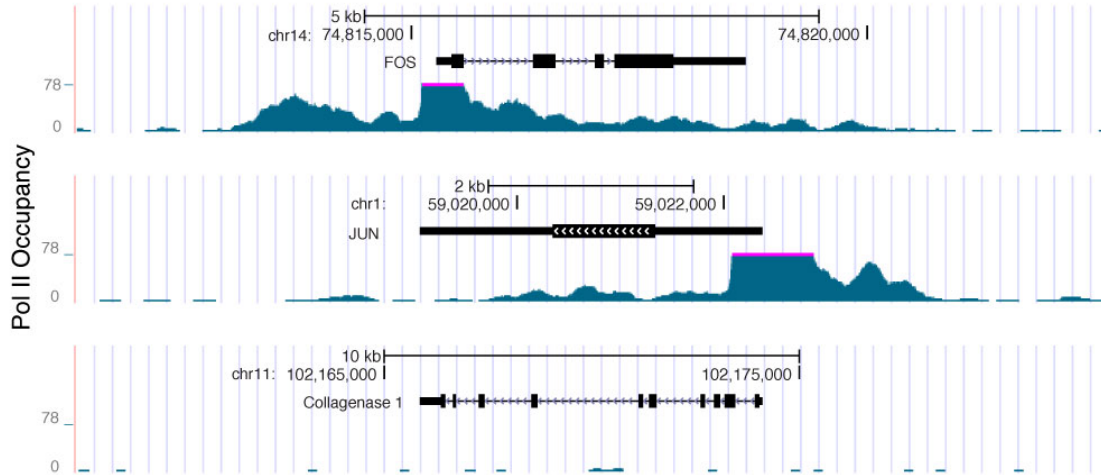


Fig. S4. Occupancy of promoters of c-fos, c-jun and collagenase 1 gene by RNA Polymerase II in steadily growing HeLa cells. Chromatin immunoprecipitation data was obtained from the ENCODE consortium and plotted using the UCSC genome browser.