

Interferon- γ induction in HeLa cells

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Stepping stone project towards highly multiplexed FISH imaging

The principle of Interferon- γ induced transcriptional memory

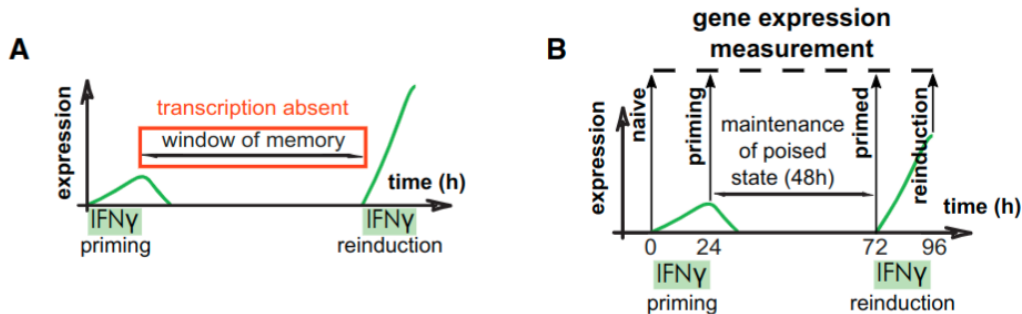
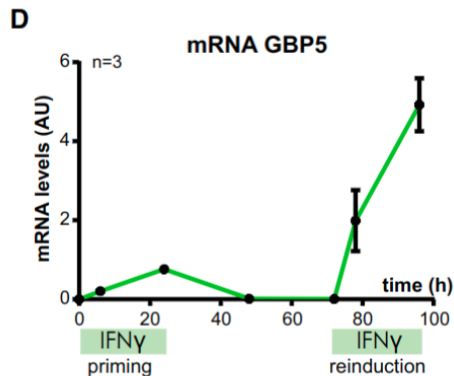
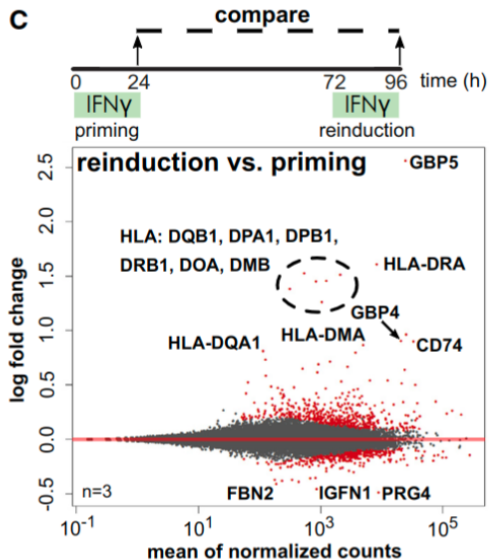


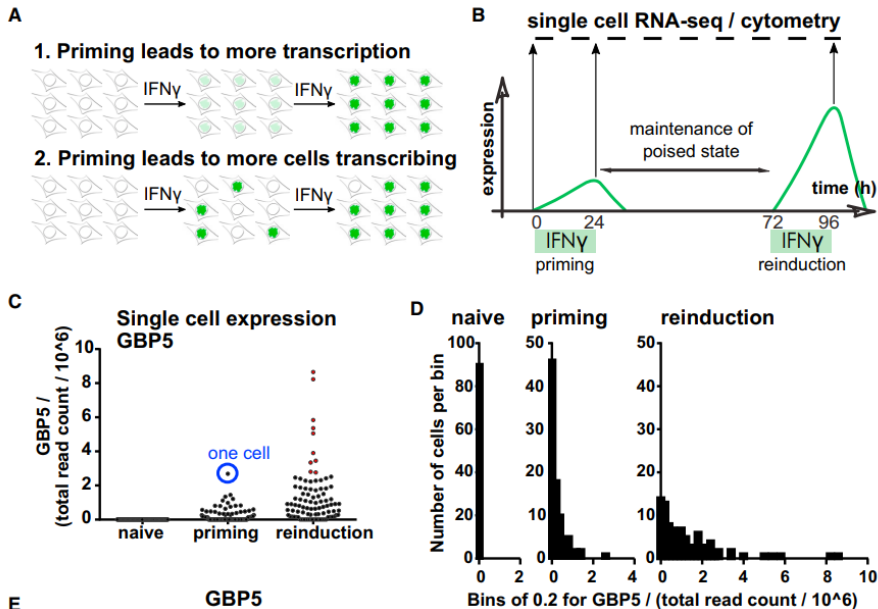
Figure 1

Siwek et al. *Activation of Clustered IFN γ Target Genes Drives Cohesin-Controlled Transcriptional Memory*. Molecular Cell 2020

Total RNA-seq identifies GBP5 as a memorized gene



Single-cell RNA-seq identifies GBP5 as a memorized gene



BLASTing probes for GPB5 and CD274

Probes are designed against the sequence of splicing variant 1

- ▶ What fraction of 48 probes designed for a particular gene bind to a transcript variant of the target gene other than variant 1?
- ▶ What fraction of 48 probes designed for a particular gene bind to 1 or more off target transcripts with E-value less than 0.05?
- ▶ Each off-target hit will have a number (out of 48) probes that will bind to it. What is the distribution of that number over all off target hits?

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