**Figure S3**

**Experimental and simulated timing on chromosome 14 in GM06990 for sequence features and gene expression.** Simulations based on genome sequence features (GC content, CpG islands), on local genome conformation (ORChID, G-quadruplex), and on organism-wide transcription start sites generate timing patterns that correlate well with replication timing in five cell lines. Simulated profiles (red) are plotted on the same axes as two empirical datasets: the Hansen (Han) dataset (red) and the Ryba (Ryb) dataset (blue).