



Figure 9. Chromatin-mediated control of the temporal pattern of proinflammatory gene expression. Key features of chromatin associated with LPS-induced genes are shown. The emphasis is placed on the differences in the CpG content of the differentially induced gene promoters as well as the abundance of the chromatin mark H3K4m3 and serine 5-phosphorylated RNA Pol II, which is characteristic for the poised state of gene expression. In both the primary and secondary response genes, RNA elongation is supported by binding of BRD4 to acetylated histone H4. The histone-bound BRD4 recruits P-TEFb, which governs an initial phase of the RNA elongation process.