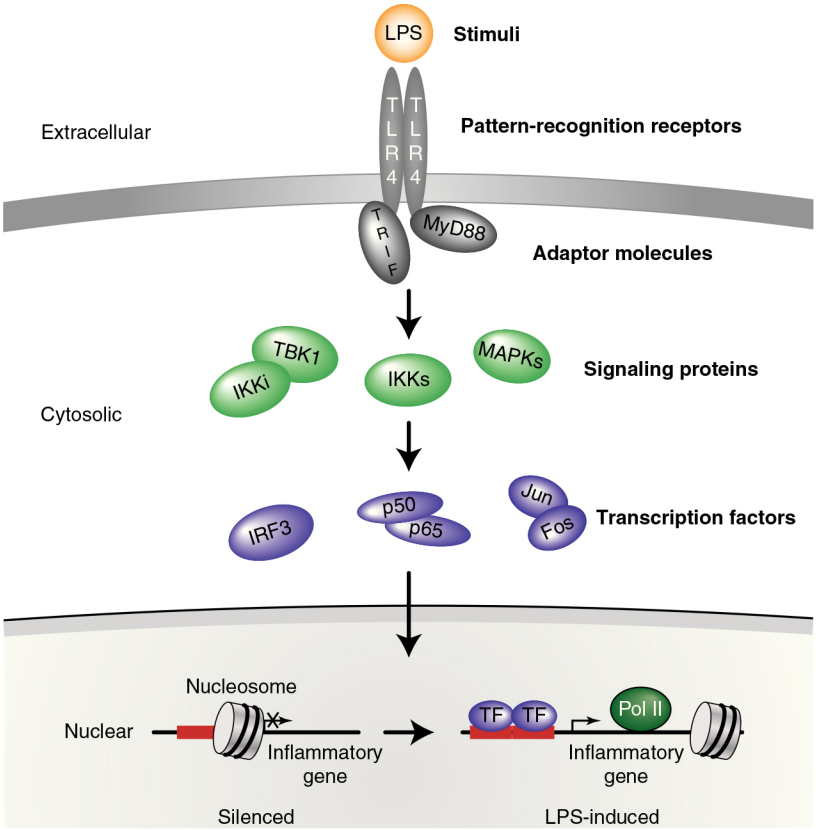

Figure 8. Signaling control of LPS-induced gene expression. The Gram-negative bacteria-derived LPS binds to the surface-expressed Toll-like receptor 4 (TLR4). Binding to TLR4 leads to activation of cytosolic signaling proteins and ensuing activation of diverse transcription factors such as NF-κB (p50/p65) and AP-1 (Jun/Fos). Transcription factors enter the cell nucleus and bind to the promoters of proinflammatory genes. In numerous cases, binding of transcription factors requires prior chromatin remodeling that provides transcription factor access to the otherwise nucleosome-occluded regulatory regions.