We looked for the effects of modulation of cytokines modulating the expression of mimitin expression and its binding partners. Our previous studies have shown that proinflammatory cytokines change modulate the expression of several mitochondrial proteins participating in ATP generation, as shown in our previous studies. Further, our studies on primary cultures of rat hepatocytes have revealed that cytokines such as interleukin (IL)-1 and IL-6 are known to affect energy metabolism and the function of mitochondrial function by significantly inhibiting ATP production and utilization in a time- and dose-dependent manner, as shown in our previous studies of primary cultures of rat hepatocytes. In this study, we witnessed that increase of the mimitin transcript and protein increased after 12 and 18 h in HepG2 cells exposed to IL-1 and IL-6 for 12 h and 18 h, respectively. These cytokines also catalyzed the expression of the luciferase reporter gene under the control of the mimitin gene promoter. It should conclude that both cytokines affect mimitin gene expression at the transcriptional level.