

A FIGURE 10-10 Schematic representation of the major form of *E. coli* RNA polymerase bound to DNA. By convention, the transcription-initiation site is generally numbered +1. Base pairs extending in the direction of transcription are said to be downstream of the start site; those extending in the opposite direction are upstream. The σ^{70} subunit binds to specific sequences near the -10 and -35 positions in the promoter. The α subunits lie dose to the DNA in the upstream direction. The β and β' subunits associate with the start site.