Supplementary Figure 1. Relatively small sized chromatin fragments were prepared by several different procedures and used for ChIPs assays. **(A)** To study histone modifications, nuclei from K562 cells carrying uninsulated (HS2ε) and insulated loci (cHS4in, cHS4out) were digested with different concentrations of MNase and the combined digests were fractionated on a sucrose gradient. The mono- and dinucleosome-containing fractions (2-7) were pooled and then incubated with antibodies as described in Materials and Methods. **(B)** To detect p300 and CBP by ChIPs assays, K562 carrying uninsulated and insulated loci were treated with 1% formaldehyde and the chromatin was then fragmented by MNase digestion and sonication to obtain primarily mononucleosome size fragments as illustrated for 3 different chromatin preparations (lanes 1-3). **(C)** ChIPs assays using antibodies to CTCF, NF-E2 and RNA pol II were performed on chromatin prepared from 0.4% formaldehyde crosslinked K562 cells carrying uninsulated and insulated loci followed by sonication to 100-500 bp fragments as illustrated for four different chromatin preparations (lanes 1-4). M, DNA size markers.