PURIFICATION OF PROTEIN–DNA COMPLEXES FOR ELECTRON MICROSCOPY STUDY BY NATIVE GEL ELECTROPHORESIS

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Electrophoretic separation under native conditions may be used for purification ofprotein molecules and their complexes with DNA and other ligands. Here, we employed this approach to separateprotein-DNA complexes with a molecular weight of approximately 200-300kDa: mono- and dinucleosomes.
The purified mononucleosomes were subjected to single particle electron microscopy study usingnegative stain contrasting, and the two-dimensional projections of the nucleosomes were obtained. A comparisonof the nucleosome projections before and after separation in the native PAGE revealed different orientationof particles on the carbon film.

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