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Extranuclear Functions of Nonhistone Protein HMGB1

E. V. Chikhirzhina^{a, *}, A. M. Polyanichko^{a, **}, and T. Yu. Starkova^a

^a*Institute of Cytology of the Russian Academy of Sciences, Saint-Petersburg, 194064 Russian Federation*

^{*}*e-mail: e.chikhirzhina@incras.ru*

^{**}*e-mail: a.polyanichko@incras.ru*

The non-histone chromosomal protein HMGB1 is one of the most abundant chromatin proteins in eukaryotes. This protein is involved in recombination, transcription, repair and other key processes required for DNA functioning in the cell nucleus. However, HMGB1 can perform a number of other important functions outside the cell nucleus. In this review we describe the mechanisms of protein export from the cell nucleus, as well as the main extranuclear and extracellular functions of HMGB1.

Keywords: alarmin, cell immune response, cellular senescence, cell metabolism, extranuclear functions of HMGB1, nonhistone protein HMGB1