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ATP synthase activity assay (radioactive)

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Proper Citation

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Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.48qgzvw>

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Summary: This protocol describes how to detect synthesis of [32 P]ATP from [32 P]ATP by recombinant KaiC proteins. Radioactive nucleotides are separated via thin layer chromatography using TLC PEI Cellulose F plates as stationary phase and LiCl as soluble phase. The principle of this method is based on Egli et al. (Egli M, Mori T, Pattanayek R, Xu Y, Qin X, Johnson CH.2012. Dephosphorylation of the core clock protein KaiC in the cyanobacterial KaiABC circadian oscillator proceeds via an ATP synthase mechanism. Biochemistry 51:1547-58.)

Associated Publications: Wiegard A, Köbler C, Oyama K, Dörrich AK, Azai C, Terauchi K, Wilde A, Axmann IM, Array. Journal of Bacteriology 202(4). doi: [10.1128/JB.00478-19](https://doi.org/10.1128/JB.00478-19)

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