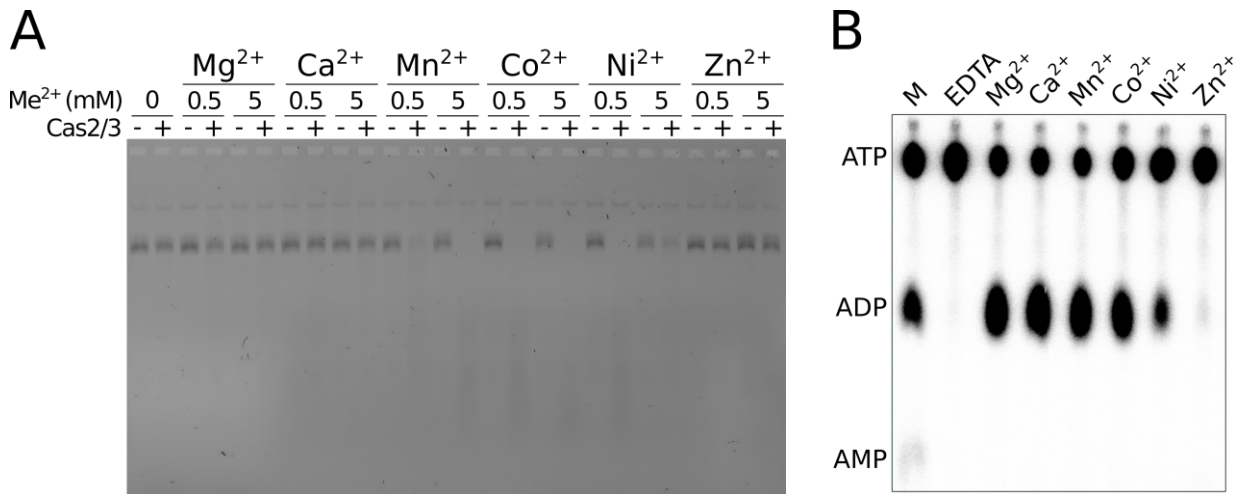


**Additional file 2, Fig. S1**



**Fig. S1.** *Cas2/3* nuclease and ATPase activity dependence on divalent metal ions. **(A)** *Cas2/3*-catalysed hydrolysis of ssDNA in the presence of different divalent metals. Nuclease reactions were conducted at 37°C for 30 min in the N1 buffers containing 5 nM single-stranded circular M13mp18 DNA, 10 nM *Cas2/3* and supplemented with 0.5 or 5 mM of indicated divalent metal ions. Reaction products were separated in agarose gel and visualised by SYBR Gold staining. **(B)** *Cas2/3*-catalysed hydrolysis of ATP in the presence of different divalent metals. ATPase reactions were conducted at 37°C for 20 min in the A buffers containing 2 mM [ $\alpha^{32}$ P]-ATP, 5 nM M13mp18 ssDNA, 200 nM *Cas2/3* and supplemented with 5 mM of indicated divalent metal ions or EDTA. Reaction products were separated on a thin-layer chromatography plate and visualized by phosphorimager.