Table 1 Effect of cations on transformation efficiency after freezing and thawing. Cells of *Schizosaccharomyces pombe* ( $leu^-$ ) were frozen in 0.6 M sorbitol with 10 mM chloride and 10 mM Hepes, pH 7.5. A cell concentration of  $1\times10^9$  cells/ml was used for each transformation with 0.5 ng of pAL7. The electric pulse setting was held constant at 10.0 kV/cm for 25 μF and 200 Ω. Data represent averages  $\pm$  SD for five independent experiments

Cation	$Transformants/\mu g~DNA$
None Li	$1.4 \pm 0.3 \times 10^{6}$ $1.5 \pm 0.2 \times 10^{6}$
Na	$1.3 \pm 0.4 \times 10^6$
K Mg Ca	$1.3 \pm 0.4 \times 10^{6}$ $1.5 \pm 0.6 \times 10^{6}$
Ca	$2.9 \pm 0.4 \times 10^6$