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Electroinduced release of recombinant β-galactosidase from *Saccharomyces cerevisiae*

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Highlights

► The present study evaluates the effect of pulsed electric field, with intensity of 4.3–5.4 kV/cm, on the release of recombinant LITAG-β-galactosidase fusion protein from *S. cerevisiae*. ► Maximal β-galactosidase release, approximately 45 % of the total activity was obtained at field intensity of 5.2 kV/cm and 1.25 ms pulse duration. ► At these electrical conditions 97% of the cells were irreversibly permeabilised, but the vacuoles remained to a large degree preserved (intact). ► The addition of lyticase (1-2 U/ml) to the electropermeabilised cells accelerates the release of the recombinant protein and increases the yield without provoking a significant cell lysis. ► PEF treatment and subsequent incubation with lyticase have a synergistic effect on β-