UNIVERSITAS
GADJAH MADA
Evaluasi Potensi Osmotic Downshock sebagai Metode Disrupsi Sel pada Planococcus sp. JS01
Nobela Dhoiriyah Putri Dinar, Muhammad Saifur Rohman, S.P., M.Si., M.Eng., Ph.D.; Susanti Mugi Lestari, S.P., M.S
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Booth, I. R., M. D. Edwards, S. Black, U. Schumann, and S. Miller. 2007. Mechanosensitive channels in bacteria: Signs of closure? Nature Reviews Microbiology, 5(6): 431–440.

Çağlayan, P. 2021. Characterization of *Planococcus dechangensis* isolated from a water sample of Çamaltı Saltern. Ege Journal of Fisheries and Aquatic Sciences, 38(4): 527–531.

Chen, R. 2012. Bacterial expression systems for recombinant protein production: *E. coli* and beyond. Biotechnology Advances, 30(5): 1102–1107.

Cooper, G. M. 2000. Cell membranes. In The Cell: A Molecular Approach. 2nd edition. Sinauer Associates.

Deissová, T., M. Zapletalová, L. Kunovský, R. Kroupa, T. Grolich, Z. Kala, P. Bořilová Linhartová, and J. Lochman. 2023. 16S rRNA gene primer choice impacts off-target amplification in human gastrointestinal tract biopsies and microbiome profiling. Scientific Reports, 13(1): 12577.

del Solar, G., R. Giraldo, M. J. Ruiz-Echevarría, M. Espinosa, and R. Díaz-Orejas. 1998. Replication and control of circular bacterial plasmids. Microbiology and Molecular Biology Reviews, 62(2): 434–464.

Galinski, E. A., and H. G. Trüper. 1997. Microbial behaviour in salt-stressed ecosystems.

Ionescu, D., L. Zoccarato, P. J. Cabello-Yeves, and Y. Tikochinski. 2024. Extreme fluctuations in ambient salinity select for bacteria with a hybrid “salt-in”/”salt-out” osmoregulation strategy. Frontiers in Microbiomes, 2.

Javid, P., H. Z. Shahabadi, H. Amirkhani, N. Amrollahi, and M. S. Ranjbar. 2020. Isolation and identification of halophilic and halotolerant bacteria from the sediments of the Qeshm Island mangrove forest: Phylogeny of bacterial community of mangrove forest sediments. Advances in Oceanography and Limnology, 11(1).

Kiattisewee, C. 2025. How many plasmids can bacteria carry? A synthetic biology perspective. Open Biology, 15(7): 240378.

Kumar, J., L. K. Narnoliya, and A. Alok. 2019. Chapter 6—A CRISPR technology and biomolecule production by synthetic biology approach. In S. P. Singh, A. Pandey, G. Du, and S. Kumar (Eds.), Current Developments in Biotechnology and Bioengineering (pp. 143–161). Elsevier.

Lee, J.-Y., C. Yoo, S.-Y. Jun, C.-Y. Ahn, and H.-M. Oh. 2010. Comparison of several methods for effective lipid extraction from microalgae. Bioresource Technology, Supplement Issue on Recent Developments of Biomass Conversion Technologies, 101(1, Supplement): S75–S77.

Levina, N., S. Tötemeyer, N. R. Stokes, P. Louis, M. A. Jones, and I. R. Booth. 1999. Protection of *Escherichia col*i cells against extreme turgor by activation of MscS and MscL mechanosensitive channels: Identification of genes required for MscS activity. The EMBO Journal, 18(7): 1730–1737.

Liu, J., W. Chang, L. Pan, X. Liu, L. Su, W. Zhang, Q. Li, and Y. Zheng. 2018. An improved method of preparing high efficiency transformation *Escherichia coli* with both plasmids and larger DNA fragments. Indian Journal of Microbiology, 58(4): 448–456.

Liu, L., H. Yang, H.-D. Shin, J. Li, G. Du, and J. Chen. 2013. Recent advances in recombinant protein expression by *Corynebacterium, Brevibacterium*, and

UNIVERSITAS
GADJAH MADA
Evaluasi Potensi Osmotic Downshock sebagai Metode Disrupsi Sel pada Planococcus sp. JS01
Nobela Dhoiriyah Putri Dinar, Muhammad Saifur Rohman, S.P., M.Si., M.Eng., Ph.D.; Susanti Mugi Lestari, S.P., M.S
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Streptomyces: From transcription and translation regulation to secretion pathway selection. Applied Microbiology and Biotechnology, 97(22): 9597–9608.

Meyer, S., M.-A. Schröter, M. Hahn, T. Solomun, and H. Sturm. 2017. Ectoine can enhance structural changes in DNA in vitro. Scientific Reports, 7.

Navarre, W. W., and O. Schneewind. 1999. Surface proteins of gram-positive bacteria and mechanisms of their targeting to the cell wall envelope. Microbiology and Molecular Biology Reviews : MMBR, 63(1): 174–229.

O'Mahony, K., R. Freitag, F. Hilbrig, P. Müller, and I. Schumacher. 2005. Proposal for a better integration of bacterial lysis into the production of plasmid DNA at large scale. Journal of Biotechnology, 119(2): 118–132.

Panja, S., S. Saha, B. Jana, and T. Basu. 2006. Role of membrane potential on artificial transformation of *E. coli* with plasmid DNA. Journal of Biotechnology, 127(1): 14–20.

Reuter, M., N. J. Hayward, S. S. Black, S. Miller, D. T. F. Dryden, and I. R. Booth. 2014. Mechanosensitive channels and bacterial cell wall integrity: Does life end with a bang or a whimper? Journal of the Royal Society Interface, 11(91): 20130850.

Rossi-Tamisier, M., S. Benamar, D. Raoult, and P.-E. Fournier. 2015. Cautionary tale of using 16S rRNA gene sequence similarity values in identification of human-associated bacterial species. International Journal of Systematic and Evolutionary Microbiology, 65(Pt_6): 1929–1934.

Shilling, P. J., K. Mirzadeh, A. J. Cumming, M. Widesheim, Z. Köck, and D. O. Daley. 2020. Improved designs for pET expression plasmids increase protein production yield in *Escherichia coli*. Communications Biology, 3: 214.

Sirajuddin, S. A., and S. Sundram. 2020. Evaluation of two transformation protocols and screening of positive plasmid introduction into *Bacillus cereus* EB2, a gram-positive bacterium using qualitative analyses. Brazilian Journal of Microbiology: Publication of the Brazilian Society for Microbiology], 51(3): 919–929.

Tang, S., J. Tao, and Y. Li. 2023. Challenges and solutions for the downstream purification of therapeutic proteins. Antibody Therapeutics, 7(1): 1–12.

Tetteh, J. N. A., F. Matthäus, and E. A. Hernandez-Vargas. 2020. A survey of within-host and between-hosts modelling for antibiotic resistance. Biosystems, 196: 104182.

Vandrich, J., F. Pfeiffer, G. Alfaro-Espinoza, and H. J. Kunte. 2020. Contribution of mechanosensitive channels to osmoadaptation and ectoine excretion in Halomonas elongata. Extremophiles, 24(3): 421–432.

Waditee-Sirisattha, R., H. Kageyama, T. Takabe, R. Waditee-Sirisattha, H. Kageyama, and T. Takabe. 2016. Halophilic microorganism resources and their applications in industrial and environmental biotechnology. AIMS Microbiology, 2(1): 42–54.

Wegner, S., S. V. Alexeeva, T. Odijk, and C. L. Woldringh. 2012. Characterization of *Escherichia coli* nucleoids released by osmotic shock. Journal of Structural Biology, 178(3): 260–269.

Wiesemüller, B., and H. Rothe. 2006. Interpretation of bootstrap values in phylogenetic analysis. Anthropologischer Anzeiger; Bericht Uber Die Biologisch-Anthropologische Literatur, 64(2): 161–165.

Wittmar, J., S. Meyer, T. Sieling, J. Kunte, J. Smiatek, and I. Brand. 2020. What does ectoine do to DNA? A molecular-scale picture of compatible solute–biopolymer interactions. The Journal of Physical Chemistry B, 124(37): 7999–8011.

Wood, J. M. 2015. Bacterial responses to osmotic challenges. The Journal of General Physiology, 145(5): 381–388.

UNIVERSITAS
GADJAH MADA
Evaluasi Potensi Osmotic Downshock sebagai Metode Disrupsi Sel pada Planococcus sp. JS01
Nobela Dhoiriyah Putri Dinar, Muhammad Saifur Rohman, S.P., M.Si., M.Eng., Ph.D.; Susanti Mugi Lestari, S.P., M.S
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Wu, M., D. Holowka, H. G. Craighead, and B. Baird. 2004. Visualization of plasma membrane compartmentalization with patterned lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 101(38): 13798–13803.

Zou, Y., Z. Zhang, Y. Zeng, H. Hu, Y. Hao, S. Huang, and B. Li. 2024. Common methods for phylogenetic tree construction and their implementation in R. Bioengineering, 11(5): 480.