Differentiation Protocol

Cat. T0284

Immortalized Human Dopaminergic Neuronal Precursor Cells (LUHMES)

Culture conditions recommended for the differentiation of Immortalized Human Dopaminergic Neuronal Precursor Cells (LUHMES):

Advanced DMEM/F12 (Gibco, 12634010) + 1X N-2 Supplement (from 100X stock) + 2mM L-glutamine (G275) + 1mM dibutyryl cAMP + 1µg/mL tetracycline + 2 ng/mL recombinant human GDNF (Z101055) + 1% Penicillin/Streptomycin (G255).

To differentiate cells into neurons, the complete growth medium should be changed to the differentiation medium after the cells have growth to a density of 40-50%. Allow cells to grow in differentiation medium for 4-6 days before testing for neuron specific markers.

This protocol has been adapted from the publication: Scholz, D., Pöltl, D., Genewsky, A., Weng, M., Waldmann, T., Schildknecht, S., & Leist, M. (2011). Rapid, complete and large-scale generation of post-mitotic neurons from the human LUHMES cell line. Journal of Neurochemistry, 119(5), 957–971. https://doi.org/10.1111/j.1471-4159.2011.07255.x **abm does not warrant the accuracy of such information; all protocols must be experimentally tested by the end-user.**

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