



Differentiation Protocol

Cat. T6455

A53T aSYN-IRES-GFP Stable LUHMES Cell Line

Culture conditions recommended for the differentiation of A53T aSYN-IRES-GFP Stable LUHMES cells:

Advanced DMEM/F12 (Gibco), + 1X N2 supplement + 2mM L-glutamine ([G275](#)) + 1mM dbcAMP + 1 μ g/ml tetracycline, and + 2 ng/ml Recombinant Human GDNF ([Z101055](#)).

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

This protocol has been adapted from the publication: Pinho, R., Paiva, I., Jercic, K. G., Fonseca-Ornelas, L., Gerhardt, E., Fahlbusch, C., Garcia-Esparcia, P., Kerimoglu, C., Pavlou, M., Villar-Piqué, A., Szego, É., Lopes da Fonseca, T., Odoardi, F., Soeroes, S., Rego, A. C., Fischle, W., Schwamborn, J. C., Meyer, T., Kügler, S., Ferrer, I., ... Outeiro, T. F. (2019). Nuclear localization and phosphorylation modulate pathological effects of alpha-synuclein. *Human molecular genetics*, 28(1), 31–50.

abm does not warrant the accuracy of such information; all protocols must be experimentally tested by the end-user.