



Applied Biological Materials Inc.

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A53T aSYN-IRES-GFP Stable LUHMES Cell Line

Cat.No.	Unit
T6455	1x10 ⁶ cells / 1.0 ml

Cat. No.	T6455
Name	A53T aSYN-IRES-GFP Stable LUHMES Cell Line
Description	<p>This cell line, the A53T aSYN-IRES-GFP Stable LUHMES Cell Line, was generated through lentiviral infection. These cells stably express A53T aSyn and are suitable for investigations focusing on neurotoxicity and the identification of targets for the treatment/prevention of neurodegenerative disorders.</p> <p><u>Additional cell lines from this panel:</u></p> <p>Cat. T6455 - A53T aSYN-IRES-GFP Stable LUHMES Cell Line Cat. T6456 - Wild Type aSYN-IRES-GFP Stable LUHMES Cell Line Cat. T6457 - IRES-GFP Stable LUHMES Cell Line</p>
Organism	Human (H. sapiens)
Tissue	Brain
Donor History	8-week-old fetal human ventral mesencephalon
Growth Properties	Adherent, epithelial
Cell Type	Stable Cell Lines
Unit	1x10 ⁶ cells / 1.0 ml
Storage Condition	Vapor phase of liquid nitrogen, or below -130°C.
Shipping Conditions	Ship with dry ice.
Product Format	Frozen
Intended Use	This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.
BioSafety	II
Certificate of Analysis	For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.abmgood.com .
Growth Conditions	Grow the cells in culture vessel pre-coated with 50 µg/ml poly-L-ornithine (PLO) (TM062) and 1 µg/ml fibronectin (EMD Millipore; Cat. FC010) in H2O for at least 3 hours at 37°C. Do not grow these cells in culture vessels with surface areas equal to or less than 12.5 cm². These cells do not grow in 6-well, 24-well, 48-well, or 96-well plates. Advanced DMEM/F12 + 1X N2 supplement (ThermoFisher Scientific) + 2mM L-glutamine (G275) + 40ng/ml Recombinant Human FGF2 (Z101455). Carbon dioxide (CO ₂): 5%, Temperature: 37.0°C.

Note: Cells may be grown in the presence of 1 µg/ml Tetracycline. Change media every 2–3 days; do not let media change colour to orange–yellow. The cells will form round clumps instead of a monolayer when stressed. Avoid subculturing if the cells appear stressed. If leaving the cells over the weekend (or more than 2 days), split cells at high ratio (1:4 to 1:5).

Cells are sensitive to trypsin; Gentle Dissociation Solution ([TM080](#)) is recommended for subculture procedures.

For information regarding cell differentiation, please refer to the Differentiation Protocol PDF under the Documents Tab.

Unpacking and Storage Instructions

1. Visually examine the packaging containers for signs of leakage or breakage.
2. Immediately transfer frozen cells from dry ice packaging to a temperature below -130°C, preferably in liquid nitrogen vapor phase storage, until ready for use.

To ensure the highest level of viability, thaw the vial and initiate culture as soon as possible upon receipt. If continued storage is desired, the vial should only be stored below -130°C or in liquid nitrogen vapor phase. Do not store at -70°C, as it will result in loss of viability.

Thawing Protocol

1. Thaw cells quickly in a 37°C water bath while agitating gently (maximum 2 minutes). The vial cap should be kept above the water level to minimize the risk of contamination.
2. Decontaminate the vial by spraying and wiping the exterior of the vial with 70% ethanol. From this point onwards, all operations should be strictly carried out inside a biological safety cabinet using aseptic conditions.
3. Transfer the cell suspension into a 15ml sterile conical tube containing 5ml of pre-warmed, complete growth media. Centrifuge cells at 125xg for 5–7 minutes.
4. Aspirate the supernatant without disturbing the cell pellet. Re-suspend the cell pellet in the recommended pre-warmed, complete growth media and dispense into a T25 culture flask.
5. Incubate the cells at the recommended conditions.

Subculture Protocol

Cells are sensitive to trypsin; Gentle Dissociation Solution ([TM080](#)) is recommended for subculture procedures.

Volumes given below are for a T75 flask; proportionally increase or decrease the volume as required per culture vessel size. Subculture cells once the culture vessel is 80% confluent.

1. Aspirate the culture media, and add 2–3ml of pre-warmed Gentle Dissociation Solution ([TM080](#)) to the culture vessel.
2. Observe the cells under a microscope to confirm detachment (typically within 2–10 minutes). Cells that are difficult to detach can be put in 37°C, for several minutes to facilitate detachment.
3. Neutralize the Gentle Dissociation Solution ([TM080](#)) by adding an equal volume of the complete growth media into the culture vessel.
4. Transfer the culture suspension into a sterile centrifuge tube, and centrifuge at 125xg for 5 minutes. The actual centrifuge duration and speed may vary depending on the cell type.
5. Aspirate the supernatant, and re-suspend the pellet with pre-warmed fresh complete growth media. Add appropriate aliquots of the cell suspension to new culture vessels, as desired.
6. Incubate the cells at the recommended conditions.

Cryopreservation

We recommend using serum-free CryoGuard™ Freezing Media ([TM078](#)).

Expression

A53T aSyn, GFP, Tetracycline resistance

Material Citation	If use of this material results in a scientific publication, please cite the material in the following manner: Applied Biological Materials Inc, Cat. No. T6455.
Warranty	abm warrants that cell lines shall be viable upon initiation of culture for a period of thirty (30) days after shipment and that they shall meet the specifications on the applicable abm Material Product Information sheet, certificate of analysis, and/or catalog description. Such thirty (30) day period is referred to herein as the "Warranty Period".
Disclaimer	<p>1. Sale of this item is subjected to the completion of a Material Transfer Agreement (MTA) by the purchasing individual/institution for each order. If you have any questions regarding this, please contact us at licensing@abmgood.com.</p> <p>2. All test parameters provided in the CoA are conducted using abm's standardized culture system and procedures. The stated values may vary under the end-user's culture conditions. Please verify that the product is suitable for your studies by referencing published papers or ordering RNA (0.5 µg, Cat.# C207, \$450.00) or cell lysate (100 µg, Cat.# C206, \$600.00) to perform preliminary experiments, or alternatively use our Gene Expression Assay Service (Cat# C138). All sales are final.</p> <p>3. We recommend live cell shipments for ease of cell transfer and this option can be requested at the time of ordering. Please note that the end-user will need to evaluate the feasibility of live cell shipment by taking into account the final destination's temperature variation and its geographical location. In addition, we thoroughly test our cell lines for freeze-thaw recovery. If frozen cells were received and not recovered in your lab under the exact, specified conditions (using recommended culture vessel, media, additional supplements, and atmospheric conditions), a live cell replacement is possible at a cost (plus shipping).</p> <p>4. All of abm's cell biology products are for research use ONLY and NOT for therapeutic/diagnostic applications. abm is not liable for any repercussions arising from the use of its cell biology product(s) in therapeutic/diagnostic application(s). Please contact a technical service representative for more information.</p> <p>5. abm makes no warranties or representations as to the accuracy of the information on this site. Citations from literature and provided for informational purposes only. abm does not warrant that such information has been shown to be accurate.</p> <p>6. abm warrants that cell lines shall be viable upon initiation of culture for a period of thirty (30) days after shipment and that they shall meet the specifications on the applicable abm Material Product Information sheet, certificate of analysis, and/or catalog description. Such thirty (30) day period is referred to herein as the "Warranty Period."</p>
Depositor	Georg-August-Universität Göttingen
QC	<p>1) Western blot</p> <p>2) Immunocytochemistry</p>
Application	Research Use Only.

Caution: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information (1-866-757-2414).