

Incubate Your Dream...

STX

Stage Top Incubator

NEW VERSION



**Tokai Hit 22 year technologies
into the Incubation System "STX"!**

Kinki University: Dr. Kazuo Yamagata

All for Living cells
for your imaging®

Leads your cell culture to success

- World's best standards: maintains an ideal environment for cell culturing, Temp. HUM. and Gas CONC..
- Keep your cells alive more than 14 days for live cell.

Selectable Incubation Mode

There are 3 cell culture modes depending on your experiment or imaging.



Original Heating Method



Our original Top Heater is capable to maintain the sample Temp. for all major vessels including the well-plates.

Advanced Quick Mode

Accumulates more than 210 patterns of temperature regulation to maintain the sample temperature optimally.

Vessel Securing Lid

Holds the vessels and the sensor securely.

Sample Feedback Regulation



Measurements of the sample temperature regulates and maintains the optimal sample temp. by inserting sensor into the media.

Sensor is auto-clavable

Top Heater

Original Glass Heater prevents the condensation, allowing clear and continuous imaging.

Sensor

Can measure the sample temperature.

Dish Attachment

Compatible with the 35mm/50mm/60mm petri dishes, slide glass, chamber slide, and chambered coverglass.

Built-in Humidifier



This keeps the humidity rate inside the Chamber at over 90%.

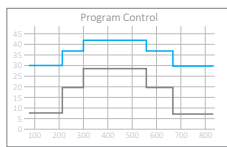
Distilled water

Tubes and Sensor Holders

Capable of holding the sensor or tubings used for experiments.

Bath Unit

Programmable Control



Programmable Control for CO₂/O₂ and Temperature is possible.
(* O₂ control is possible with O₂ module)

Screen Capture



Capture and send the PC screen to desired email.
(* PC has to be connected to internet.)

Lens Heater

Strongly recommended when observing with high-magnification lenses and oil/water immersion lenses

Model: WSKMX

Controller



Model: STXG

With built-in digital gas mixer for 100%CO₂ gas cylinder use



Model: STXF

With a flow-meter for premixed gas (5%CO₂+95%Air) cylinder use

Stress-Free Quality

- Varieties of new functions has achieved the "Stress-Free Quality".

Touch Panel Control

Intuitive operation with simple actions.

Magnetic Fixing

Securely install vessels with no stress.

Strengthen Glass Top Heater

Strengthens glass applied

Lowers the risk of glass breakage that could stop your experiment.

Tangle-Proof Lens Heater Cord

The plug will automatically come off before the cord gets tangled into the objective revolver.

Simple Selections

- Now available with accessories.
- Varieties of Add-on options also available.

SET Model

All the accessories such as Dish Attachments or Fixing Lid are included as standard.

Chamber

Lens Heater

Controller

Dish Attachments

ATX-D ATX-CSG
ATX-A*

Vessel Securing Lids

LX-D35 LX-CSG
LX-D56 LX-W*

Others

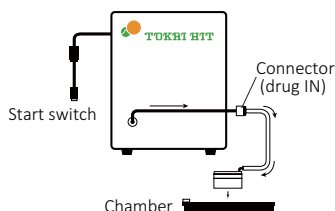
Feedback Sensor Extension Wire
Software

* ATX-A and LX-W include the Chamber which can install a well-plate.

Add-on Options

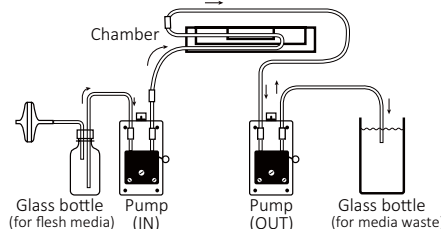
Drug administration

Allows rapid and vibration-free drug administration by delivering the drug by air. Enables to keep the same cell in focus before and after the delivery.



Perfusion / Media exchange

Allows perfusion / media exchange without removing dish lid and Top Heater. (Prevents contamination and media evaporation during long-term experiment.)



Hypoxia condition

Creates hypoxia and normal conditions with easy settings. Requires only CO₂ and N₂ cylinders allowing safe, low oxygen environment.

O₂ concentration: 0.1% - 18.0%



Stage Top Incubator Culture Results

| No. | Attribute of cell | Name | Details | Period |
|-----|-------------------|--------------------|---|--------|
| 1 | Cultured cell | STO | Embryo; fibroblast, mouse | 5 days |
| 2 | Cultured cell | PC12 | Pheochromocytoma; adrenal gland, rat (male) | 5 days |
| 3 | Cultured cell | HeLa | Adenocarcinoma; cervix human (female, 31 years) | 5 days |
| 4 | Primary | Human Embryo | Form fertilization to hatching blastocyst over 7 days | 7 days |
| 5 | Primary | Neurons | Development of rat cerebral cortical neurons | 4 days |
| 6 | Primary | Neural Stem Cells | Proliferation of neural stem cells of 14-day-old rat embryo | 7 days |
| 7 | Primary | Neural Stem Cells | Differentiation of rat neural stem cells to neurons and glial cells | 7 days |
| 8 | Primary | Hippocampal Neuron | E18 rat hippocampal neurons, cultured in CO2 incubator for the first day | 5 days |
| 9 | Primary | Cardiac Myocyte | Neonatal rat heart, fetal mouse (13 days embryo) heart, observation of heart beat synchronization | 3 days |

Time-Lapse Movies



Harvard Medical School
Human Bone Cancer Cells - imaged every 5 minutes



Moritoshi Sato@Tokyo University
150 hours - Long term Mouse Keratubocyte DIC imaging



Dr. Simon Watkins@University of Pittsburgh
HeLa Cells imaged every 15 minutes

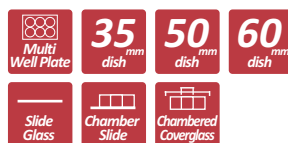


Line-up

For XY motorized stage (with 160x110mm opening)

- **STXG-WSKMX-SET**
With built-in digital gas mixer for **100%CO2 gas** cylinder use
- **STXF-WSKMX-SET**
With a flowmeter for **premixed (5%CO2+95%Air) gas** cylinder use

Applicable dishes:



WSKMX Chamber

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Please pay special attention to items marked with Caution and warning symbols as shown on the left. Read Instruction manual carefully before using the device

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- Specifications and products in this leaflet are subject to change without any obligation on the part of the manufacturer / distributor

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