High throughput real-time luciferase assay system

WSL-1565 Kronos HT

- > High throughput live cell realtime reporter assay
- > Measuring with temperature and CO_2 controlled incubation chamber
- > 24 well plate x 2 or 96 well plate x 2 (option)
- > Data display with real-time
- > Detectors scan each well, so culture plates don't move.
- > Lower noise by PMT cooling
- > Dual-color luciferase assay by optical filter auto-changing

Code No.	Model
3510140	WSL-1565 Kronos HT Kronos HT main unit, Control software (for Windows PC), CO_2 gas mixer, Humidifying unit, 24 well plate adapter

Kronos HT main unit | Windows PC | CO_2 gas mixer | Humidifying unit

Model	WSL-1565 Kronos HT
Detector	Photomultiplier tube (10°C cooling) x 2 units, X-Y actuating
Measurement	Photon counting method
Measurement time	Integral time: 1 - 60 s/well, Measurement term: 1 h - 30 days
Plate format	Clear bottom 24 well plate x 2 (Standard) Clear bottom 96 well plate x 2 (Option), 35 mm dish x 12 (Option)
Throughput	48 samples (24 well plate x 2) 192 samples (96 well plate x 2, option) 12 samples (35 mm dish x 12, option)
Incubation temperature control	Room temperature + 5°C to 45°C at room temperature 20 - 28°C
CO_2 gas control	Control to 5% by CO_2 gas mixer
Humidification	Setting of water reservoir in incubator and humidified 5% CO_2 gas flowing intermittently by humidifying unit Maintaining >90%RH
Multi-color assay	Measurement with automatically selected optical filter up to 2 colors
PC requirements	OS: Windows 10 / 8.1 / 7, 64 / 32 bit, Memory: 4 GB, HDD: more than 20 GB free space Interface: USB2.0 x 1 port
Dimensions, Weight	Main unit: 650 (W) x 520 (D) x 340 (H) mm, 40 kg CO_2 gas mixer: 160 (W) x 300 (D) x 200 (H) mm, 4.8 kg Humidifying unit: 170 (W) x 140 (D) x 115 (H) mm, 1.6 kg
Power	Main unit: AC 100 - 240 V, 50 / 60 Hz, 400 W (max) CO_2 gas mixer: AC 100 - 240 V, 50 / 60 Hz, 100 W (max) Humidifying unit: AC 100 - 240 V, 50 / 60 Hz, 24W (max)

Option

Code No.	Model
3510146	24 well plate adapter
3510147	96 well plate adapter
3510148	35 mm dish adapter

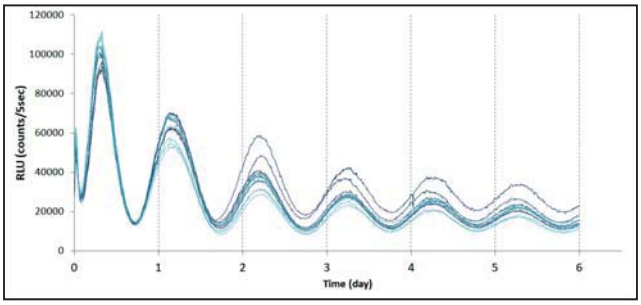
96 well plate adapter attached

Application data

Circadian rhythm of clock gene expression

Transcriptional activity of clock gene, *mPer2*

mPer2 promoter - Eluc (PEST) expressed fibroblast stable cell line in 24 well clear bottom plate
Measurement time: 5s / well, Interval time: 10min

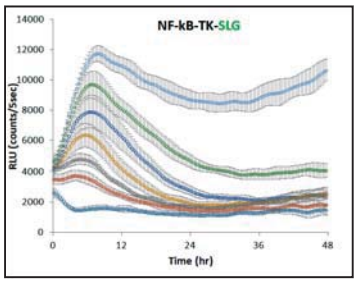


Drug response of transcription factor

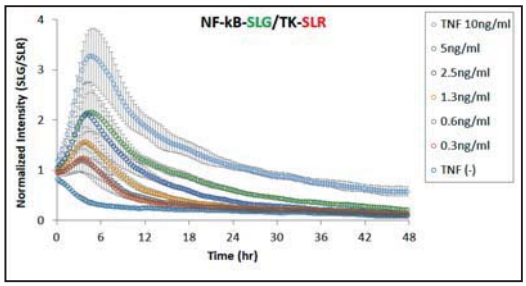
Dual-color real-time luciferase assay of TNF-α induced NF-κB transcriptional activity

NF-κB response elemnt - TK promoter - SLG (green color emited luciferase) and TK promoter - SLR (red color emitted luciferase) expressed fibroblast cell line in 96 well clear bottom plate
Measurement time: 5s x 2 color / well, Interval time: 30min
(A), (B) Transcriptional activity of NF-κB and TK promoter for 48h
(C) Normalized by activity of control (TK)
(D) Ratio to NF-κB activity without TNF-α

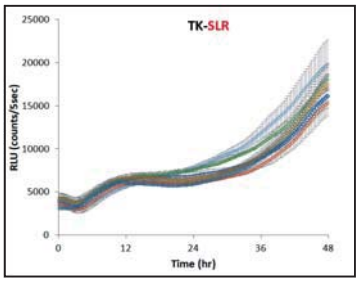
(A)



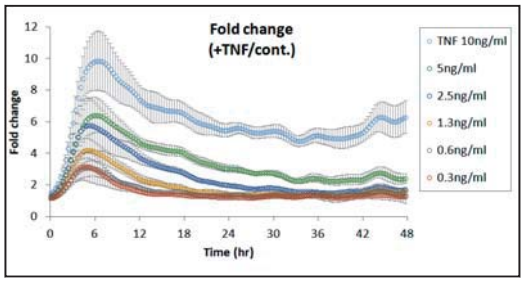
(C)



(B)



(D)



Since 1964
ATTO
Made in Tokyo
SupportingLifeResearch