ARCTis™ Oncology   HT29
Always Ready Cryo Tissues

Origin

HT-29 is a cell line with epithelial morphology that was isolated in 1964 from a primary tumor obtained from a 44-year-old, caucasian, female patient with colorectal adenocarcinoma. This cell line is a suitable transfection host and has applications in cancer and toxicology research. (ATCC HTB-38™)
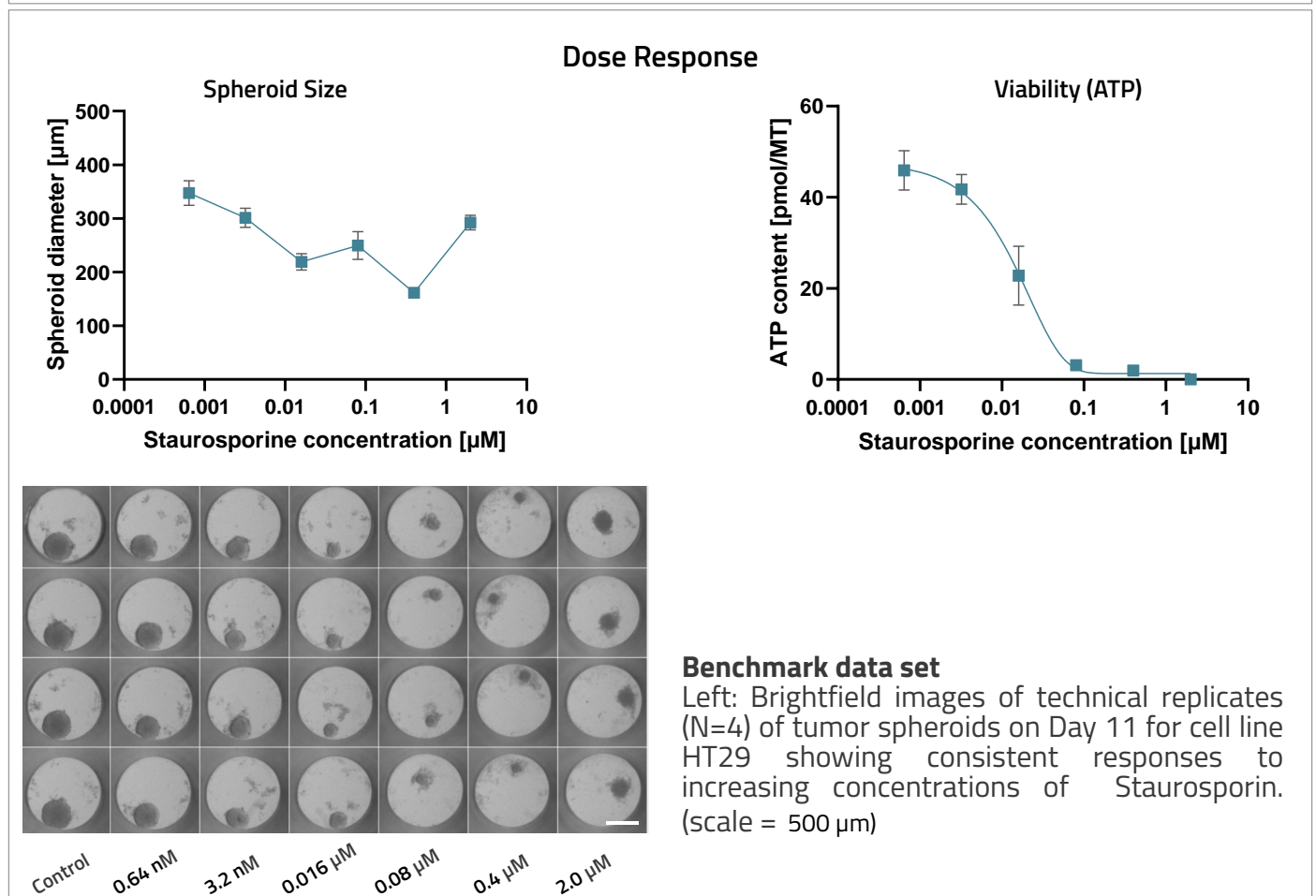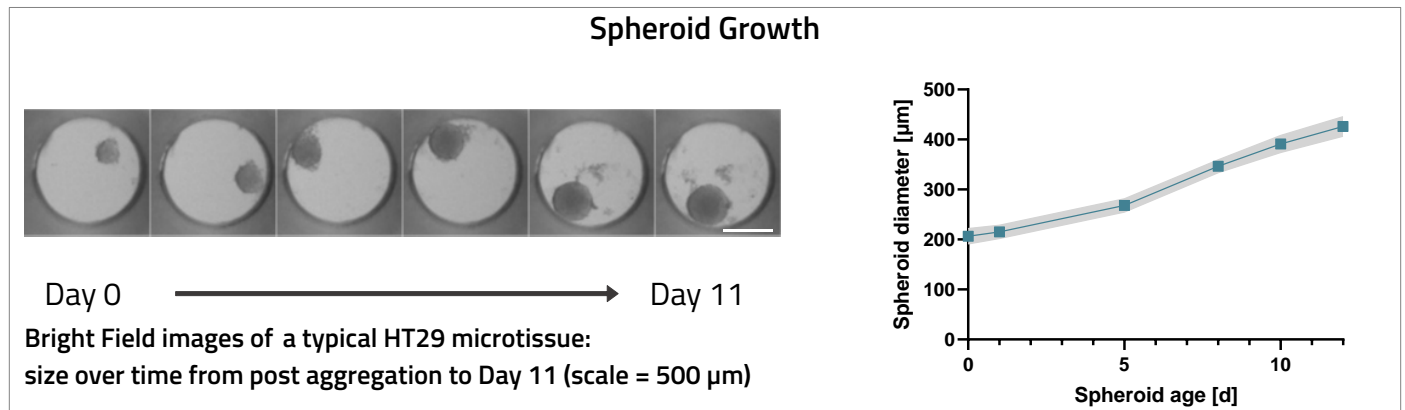
Cell Line	
Product category	Human cells
Organism	Homo sapiens, human
Morphology	epithelial
Tissue	Colon
Disease	Adenocarcinoma; Colorectal
Applications	3D cell culture Cancer research High-throughput screening Toxicology
Product format	Frozen
Storage conditions	-80°C
Culture platform	Akura™ 96 Spheroid Microplate
Delivery format	96 well/ one MT per well

Model set up	
Model type	Monotypic tumor microtissue
Inoculation cell nr.	1000 cells/well
Assay-Ready*	3 days in culture
Morphology	Compact, spheroidal
Size after re-aggregation	~240 µm
Assay specifications	
Assay window	Up to 11 days
Max. tissue size day 10 (Growth window, ∅)	~400 µm (~160 µm)
Vialbility ATP (Day 10)	~25.1 pmol/MT
Max. Treatment response for size (Staurosporin, ∅)	400 - 160 µm
*Use recommended Re-aggregation Medium **Use Tumor Maintenance Medium	

ARCTis™ Oncology HT29

Reference data set

HT29 cell line was evaluated for spheroid formation, growth and viability over 11 days. Growth characteristics for this model with respect to proliferation and size were measured over 11 days and benchmarked using a standard cytotoxic agent - Staurosporine. Day 0 defines the start of an assay which for HT29 is after 3 days in culture for reaggregation and cryopreservation recovery.

Spheroid Growth

Day 0 → Day 11

Bright Field images of a typical HT29 microtissue: size over time from post aggregation to Day 11 (scale = 500 µm)

Dose Response

Spheroid Size

Viability (ATP)

Control 0.64 nM 3.2 nM 0.016 µM 0.08 µM 0.4 µM 2.0 µM

Benchmark data set

Left: Brightfield images of technical replicates (N=4) of tumor spheroids on Day 11 for cell line HT29 showing consistent responses to increasing concentrations of Staurosporin. (scale = 500 µm)

Item #	Var. Code	Description
AT-NB00-0T0-001	HT29	ARCTis™ Oncology - Colorectal

Mycoplasma	The cell line was tested negative
Virus	Refer to CoA of prod. lot
Quality Control & batch number	Supplied with each shipment

Flyer Version: 2023-Jun Vers 1