SW837

305647

BENDRA INFORMACIJA

Aprašymas

SW837 is a human colorectal adenocarcinoma cell line derived from the primary tumor of a patient with rectal carcinoma. It has been widely used in colorectal cancer research due to its genetic alterations and molecular characteristics that are representative of the disease. This cell line is characterized by epithelial morphology and anchorage-dependent growth, making it suitable for in vitro studies of colorectal cancer progression, metastasis, and drug response.
Pharmacogenomic studies have evaluated SW837's drug sensitivity profile, particularly in relation to chemotherapy and targeted therapies. The cell line has been included in large-scale screening efforts to assess responses to anti-cancer agents such as 5-fluorouracil (5-FU), oxaliplatin, and targeted inhibitors of key oncogenic pathways. Transcriptomic analyses suggest that SW837 shares molecular features with certain primary colorectal tumors, making it a valuable model for studying tumor biology and potential therapeutic interventions.

Audinys	Rectum
Liga	Rectal adenocarcinoma, Stage 4

Sinonimai

- SW-837
- SW 837

KLASIFIKACIJA

Organizmas	Žmogus
Seksas	Vyras
Augimo savybės	Prisijungęs
Biologinio saugumo lygis	1

CHARAKTERISTIKOS

Morfologija	Epithelial
Laikas, per kurį skaičius padvigubėja	169 hours

IDENTIFIKATORIAI

Nuoroda

SW837 (Cytion catalog number 305647)

NCBI mokesčių identifikavimo kodas	9606
Cellosaurus	CVCL_1729

IŠRAIŠKA IR JAUTRUMAS

Mutacijų profilis

Mutation: APC, Simple, p.Arg1450Ter (c.4348C>T), Unspecified; Mutation, FBXW7, Simple, p.Leu403fs*34 (c.1208_1209insT), Unspecified; Mutation, KRAS, Simple, p.Gly12Cys (c.34G>T), Heterozygous; Mutation, TP53, Simple, p.Arg248Trp (c.742C>T), Hemizygous

LAIKYMAS IR AUGINIMAS

Maitinamoji terpė

DMEM:Ham's F12 (1:1), w: 3.1 g/L Glucose, w: 2.5 mM L-Glutamine, w: 15 mM HEPES, w: 0.5 mM Sodium pyruvate, w: 1.2 g/L NaHCO3 (Cytion article number 820400a)

Inkubacijos aplinka	37°C, 5% CO_2, humidified atmosphere.

Maisto papildai

Supplement the medium with 10% FBS

Disociacijos reagentas	Accutase
Sėjos tankis	2-4*10^4/cm²

Atšildymas ir auginimas

Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

KOKYBĖS KONTROLĖ IR KRIOKONSERVAVIMAS

Sterilumas

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.
To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.

Šaldymo terpė	As a cryopreservation medium, we recommend CM-1 (Cytion catalog number 800100), which includes optimized osmoprotectants and metabolic stabilizers to enhance recovery and reduce cryo-induced stress.

Laikymo sąlygos

For long-term preservation, place vials in vapor-phase liquid nitrogen at about −150 to −196 °C. Storage at −80 °C is acceptable only as a short interim step before transfer to liquid nitrogen.

Pristatymo sąlygos

Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately −78 °C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

DONORAS

Donoro amžius	53 years
Etninė priklausomybė	Caucasian

TEISINIAI IR SAUGOS KLAUSIMAI

Saugos priemonės

When planning to store a cryovial in liquid nitrogen for future thawing, it is mandatory to adhere to stringent safety measures. Appropriate protective gloves and clothing are essential, and the use of a face mask or safety goggles is required during the transfer of frozen samples to or from the liquid nitrogen tank. This is to mitigate the risk of injury from potential cryovial explosions upon removal, which can result in the projection of sharp fragments.

Garantija

At Cytion, we stand behind the quality and viability of our products.
We guarantee that our cells will be viable at the start of culture for
60 days after shipment from our facilities.
We assure that all materials conform to the specifications described in the
Certificate of Analysis and/or Product Sheet.
For full details, please refer to our
Warranty Statement.

Reikalinga medžiagų perdavimo sutartis	Yes

PRODUKTO APRAŠYMAS

Sudėties lentelė