SW837

305647

ΓΕΝΙΚΈΣ ΠΛΗΡΟΦΟΡΊΕΣ

Περιγραφή

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.

Ιστός	Rectum
Ασθένεια	Rectal adenocarcinoma, Stage 4

Συνώνυμα

- SW-837
- SW 837

ΤΑΞΙΝΌΜΗΣΗ

Οργανισμός	Άνθρωπος
Σεξ	Άνδρας
Ιδιότητες ανάπτυξης	Πιστός
Επίπεδο βιοασφάλειας	1

ΧΑΡΑΚΤΗΡΙΣΤΙΚΆ

Μορφολογία	Epithelial
Χρόνος διπλασιασμού	169 hours

ΑΝΑΓΝΩΡΙΣΤΙΚΆ

Παραπομπή

SW837 (Cytion catalog number 305647)

Αριθμός φορολογικού μητρώου NCBI	9606
Κελλοσαύρος	CVCL_1729

ΈΚΦΡΑΣΗ ΚΑΙ ΕΥΑΙΣΘΗΣΊΑ

Προφίλ μεταλλάξεων

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

ΧΕΙΡΙΣΜΌΣ ΚΑΙ ΚΑΛΛΙΈΡΓΕΙΑ

Θρεπτικό μέσο

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)

Ατμόσφαιρα επώασης	37°C, 5% CO_2, humidified atmosphere.

Συμπληρώματα

Supplement the medium with 10% FBS

Αντιδραστήριο αποσύνδεσης	Accutase
Πυκνότητα σποράς	2-4*10^4/cm²

Απόψυξη και καλλιέργεια

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.

ΈΛΕΓΧΟΣ ΠΟΙΌΤΗΤΑΣ ΚΑΙ ΚΡΥΟΣΥΝΤΉΡΗΣΗ

Στειρότητα

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.

Μέσο κατάψυξης	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.

Συνθήκες αποθήκευσης

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.

Όροι αποστολής

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.

ΔΩΡΗΤΉΣ

Ηλικία δωρητή	53 years
Εθνικότητα	Caucasian

ΝΟΜΙΚΆ ΘΈΜΑΤΑ ΚΑΙ ΑΣΦΆΛΕΙΑ

Μέτρα ασφαλείας

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.

Εγγύηση

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.

Απαιτείται συμφωνία μεταφοράς υλικού	Yes

ΛΕΠΤΟΜΈΡΕΙΕΣ ΠΡΟΪΌΝΤΟΣ

Πίνακας σύνθεσης