

Coronavirus (COVID-19): Culture Collections is committed to supporting Public Health England (**PHE**) in the delivery of essential services central to the COVID-19 response. We have therefore temporarily suspended dispatch of orders and provision of all services until further notice to release staff to other departments. Thank you for your patience and understanding during this challenging time. [Find out more](#)

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General Cell Collection Detail

ECACC General Cell Collection: HT29-MTX-E12

Supplied by:	European Collection of Authenticated Cell Cultures (ECACC)
Culture Type:	Cell line
Collection:	ECACC General Collection
Catalogue No.:	12040401
Cell Line Name:	HT29-MTX-E12
Citation Guidance:	If use of this culture results in a scientific publication, it should be cited in the publication as: HT29-MTX-E12 (ECACC 12040401)
Keywords:	HT29, HT29-MTX, methotrexate, mucous layer, intestinal permeation, oral drug absorption

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HT29 cells were differentiated into mature goblet cells using methotrexate. Mucous-secreting HT29-MTX subclones were isolated from this cell clone and characterized with regard to tight junction formation, development of confluent monolayers and production of a mucous layer. HT29-MTX-E12 provides a model system to study the influence of the mucous layer on nanoparticle diffusion.

[Virus LENTICULE discs](#)**Species:**

Human

Tissue of Origin:

Colon

CellType:

Epithelial

Growth Mode:

Adherent

DNA Profile:

STR-PCR Data:

Amelogenin: X
CSF1PO: 11,12
D13S317: 11
D16S539: 11,12
D5S818: 11,12
D7S820: 10
THO1: 6
TPOX: 8,9
vWA: 17

Induced Pluripotent Stem Cells

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Biosafety Information:	<p>Unless specified otherwise, at the European Collection of Authenticated Cell Cultures (ECACC) we routinely handle all of our cell lines at containment level 2 in accordance with the ACDP guidelines. ACDP = Advisory Committee on Dangerous Pathogens (UK)</p> <p>All cell cultures have the potential to carry as yet unidentified adventitious agents. It is the responsibility of the end user to ensure that their facilities comply with biosafety regulations for their own country.</p> <p>ACDP Guidance: Biological agents: Managing the risks in laboratories and healthcare premises.</p> <p>Hyperlinks to MSDS documents: Frozen cell cultures Material Safety Data Sheet Growing cell cultures Material Safety Data Sheet Nucleic acids derived from cell cultures Material Safety Data Sheet</p>
Subculture Routine:	<p>Split subconfluent cultures (70-80%) 1:3 to 1:6 using 0.25% trypsin/EDTA; 7.5-10% CO₂; 37°C. Suggested seeding density 2-4x10,000 cells/cm².</p>
Culture Medium:	<p>DMEM + 2mM Glutamine + 1% Non essential amino acids + 10% Foetal Bovine Serum (FBS).</p>
Depositor:	<p>Professor David Brayden, Associate Professor of Drug Delivery and Kevin McMahon, Senior Technical Officer, University College Dublin, UCD School of Veterinary Medicine, Belfield, Dublin 4, IRELAND. Originator: Professor Per Artursson, Uppsala University, Sweden.</p>
Originator:	<p>No</p>
Country:	<p>Ireland</p>
References:	<p>Behrens I, Stenberg P, Artursson P, Kissel T. 2001 Transport of lipophilic drug molecules in a new mucus-secreting cell culture model based on HT29-MTX cells. Pharm Res. 18:1138-45. PMID: 11587485.</p>

Additional Bibliography: Keely S, Rullay A, Wilson C, Carmichael A, Carrington S, Corfield A, Haddleton DM, Brayden DJ. 2005 In vitro and ex vivo intestinal tissue models to measure mucoadhesion of poly (methacrylate) and N-trimethylated chitosan polymers. Pharm Res. 22:38-49. PMID: 15771228.

Patents: None specified by Depositor

Release Conditions: No



Product Images

- [12040401_HT29-MTX-E12_72hr](#)
- [12040401_HT29-MTX-E12_96hr](#)
- [12040401_HT29-MTX-E12_120hr](#)

Note: *Links open in a new window*



Product Documents

- [12040401_HT29-MTX-E12_Growth Profile](#)
- [12040401_HT29-MTX-E12_Images](#)
- [Passage numbers explained](#)

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Related Products

You might be interested in the following related products:

- [ECACC General Cell Collection - HT29](#)

The Culture Collections represent deposits of cultures from world-wide sources. While every effort is made to ensure details distributed by Culture Collections are accurate, Culture Collections cannot be held responsible for any inaccuracies in the data supplied. References where quoted are mainly attributed to the establishment of the cell culture and not for any specific property of the cell line, therefore further references should be obtained regarding cell culture characteristics. Passage numbers where given act only as a guide and Culture Collections does not guarantee the passage number stated will be the passage number received by the customer.

Cultures supplied by Culture Collections are for research purposes only. Enquiries regarding the commercial use of a cell line are referred to the depositor of the cell line. Some cell lines have additional special release conditions such as the requirement for a material transfer agreement to be completed by the potential recipient prior to the supply of the cell line. Please view the Terms & Conditions of Supply for more information.

Available Formats

Frozen

Growing

DNA-5µg (100ng/µl)

RNA-5µg (100ng/µl)

cDNA-20µl

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