

## ECACC news - February 2017

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### ECACC top tips: serum free cell culture

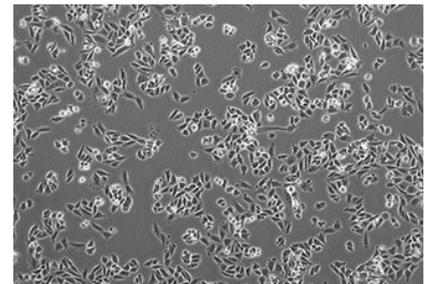
Q: Can serum free cell lines be more difficult to resuscitate and culture than adherent and suspension cell lines cultured using serum?

Scroll down for the answer...



**ECACC cell lines in research: 2016** A review of 80 scientific publications citing the use of ECACC cell lines, published on line during 2016, emphasises the value of cell lines as tools in our quest to understand and combat human diseases. The use of 88 different ECACC cell lines was cited by authors affiliated to organisations in 36 countries, with significant focus on the pathogenesis and treatment of human cancers. [Find out more](#)

**Cell line profile - CHO-K1** CHO cell lines and their sub-clones are useful in many applications as they can be genetically manipulated to grow as either adherent or suspension cells. They also have an established history of regulatory approval for therapeutic recombinant protein production. This has resulted in these cell lines playing a dominant role as host expression systems for a broad range of products such as growth factors, hormones, monoclonal antibodies, interferons and enzymes. They are also widely used for *in vitro* cancer studies, particularly for ovarian cancer. [Find out more](#)



[Find more cell line profiles here](#)

**Planning a large patient research study? Need to store or separate blood samples?** We have 30 years' experience of providing support services for human genetic disease research such as:



- cryopreservation of whole blood to enable future EBV immortalisation
- separation of Peripheral Blood Lymphocytes (PBLs) from whole blood for cryopreservation and long-term storage
- generation of lymphoblastoid cell lines by EBV immortalisation from PBLs or cryo-preserved whole blood
- DNA extraction from whole blood or cultured lymphoblastoid cell lines
- RNA extraction from cultured lymphoblastoid cell lines

ECACC has generated tens of thousands of lymphoblastoid cell lines over the last 30 years for hundreds of different research projects giving it a wealth of experience in this field. Before embarking on a new project or applying for a grant please [contact us](#) for advice and discuss how we might help to support your project.

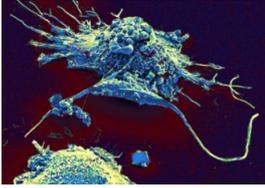
[Find out more](#)

**Congratulations to our crossword competition winner - Helena Robinson!**

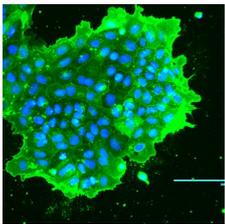
**CHO cell lines expressing Fcγ receptors – an *in vitro* tool for antibody based drug discovery** New CHO cell line variants, expressing different classes of Fc gamma receptors (FcγRs) have been deposited exclusively into the ECACC General Collection by Cambridge Enterprise Limited, UK. The variant lines were developed in the laboratory of Dr. Mike Clark at Cambridge University and include five cell lines that express three different human FcγRs including allotypes of FcγRIIa and FcγRIIIa.



[Find out more](#)



**Reproducibility in pre-clinical life science research** Reproducibility forms the foundation of meaningful scientific research and is an issue which is causing increasing concern. The causes are complex and include lack of validation of key biological reagents and reference material (including cell lines), poor study design, inadequate data analysis and reporting, and a lack of robust laboratory protocols. This means that the solutions will be complex and will require the concerted effort of all stakeholders involved in the pre-clinical science fields including scientists, journals, funding bodies and even mainstream media. [Find out more](#)



**ECACC image of the month**

**Do you have an image of ECACC cell lines that you want featured here?** ECACC's Jim Cooper features this month with his immunofluorescent staining of an EBiSC iPSC colony (Universitätsklinikum Köln iPSC [UKKi007-A](#)) stained for the stem cell marker SSEA4 (mouse anti-human primary antibody, goat anti-mouse secondary antibody labelled with Alexafluor 488). Nuclear Counterstaining with DAPI.

[Click here to submit your image](#)

**Do you want a trade stand at the ECACC Fast Track Training Course at Durham University, UK?**



There are still limited places for the Trade Exhibition and lunch time technical “snapshot” presentations during our Fast Track training course. If you have a product or service relevant to cell culture and you would like to learn more about this opportunity please contact [Dr Nicola Fullard](#)

### ECACC top tips: serum free cell culture

A: Yes, in some cases it can be more difficult to successfully resuscitate serum free cell lines. For cell lines which have been adapted to serum free or animal component free media, cell viability may be poor on resuscitation and may initially decrease further. Full recovery and establishment of a proliferating cell line may take up to 2 weeks.

When ordering this type of cell line from ECACC we recommend that you read the subculture routine given in the cell line catalogue entry where we recommend a specific protocol for the resuscitation and culture of these cells; this will be stated in the subculture routine. This is the protocol which is routinely and successfully used here at ECACC.

Should you have any questions or concerns about culturing your serum free cell line then please contact [Culture Collections Technical Support](#)



[Check out ECACC's most recent cell line additions](#)



YouTube

[Download the ECACC brochure](#)

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