Porcine B lymphoma cell lines

Technology #20160314

Three porcine B cell lines (Murtaugh001, Murtaugh002, Murtaugh003) established by 3 rounds of limiting dilution from splenic and subiliac lymph node lymphomas.

Surface marker staining identified the cells as CD21+, CD79a+, CD20+, PAX5+, and CD3- and cells were grown and easily passaged in cell culture. Transcriptome analysis validating the initial cytometric findings, confirming their identity as B cell lymphomas, and suggesting that they arose from germinal center centroblasts with aberrant control of BCL6 expression.

Applications

- Investigate porcine B cell cancers and immune responses
- Grow viruses to assess host responses
- Virus propagation

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Key Benefits & Differentiators

- First and only porcine B cell line available.
- Highly proliferative: Cell lines grow for more than 60 passages (16 months) with a doubling time of 16 hours.
- Robust: Tolerate cryogenic storage and thawing.

Technical information

Organism: *Sus scrofa* (pig)
Tissue: Lymphoma (subiliac lymph node and spleen tumors)
Cell Type: Porcine B cell lymphoma
Morphology: Round
Culture properties: Non-adherent, suspended, clustered. Doubling time of 16 hours
Biosafety level: BSL1
Storage: Liquid nitrogen. 50% FBS, 40% supplemented RPMI, 10% DMSO
Growth Media: RPMI media supplemented with 10mM HEPES buffer, 1X non-essential amino acids, 1mM sodium pyruvate, 50ug/ml gentamycin, 5U/ml penicillin-streptomycin and 5-10% FBS
Propagation protocol: Divide once per week at 1:5 ratio

Desired Partnerships

These cell lines are fully developed and available for license. Please contact Naomi Walsh to learn more.

Publications


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