



Porcine B lymphoma cell lines

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

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

Researchers

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[External Link](http://vetmed.umn.edu) (vetmed.umn.edu)

Publications

[Establishment and characterization of a porcine B cell lymphoma cell line.](#)

Experimental Cell Research, 390(2) May 2020

Technology ID

20160314

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