## 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.

Technology No. 20160314

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, 1 mM sodium pyruvate, $50 \mathrm{ug} / \mathrm{ml}$ gentamycin, $5 \mathrm{U} / \mathrm{ml}$ penicillin-streptomycin and $5-10 \%$ FBS

Propagation protocol: Divide once per week at 1:5 ratio

## Researchers

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## Publications

Establishment and characterization of a porcine B cell lymphoma cell line.
Experimental Cell Research, 390(2) May 2020

## Desired Partnerships

These cell lines are fully developed and available for license. Please contact us to learn more.
https://license.umn.edu/product/porcine-b-lymphoma-cell-lines

