

Bovine Primary Mammary Epithelial Cells

Bovine mammary cells expressing a primary cell phenotype with application in cell-based screening and academic research

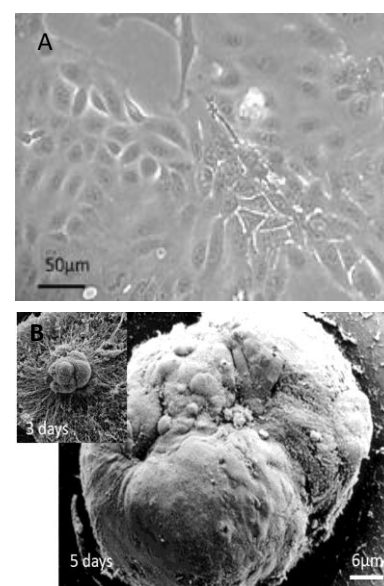
Primary cells isolated from mammary parenchyma of cows by enzymatic digestion and fractionated by differential density gradient centrifugation before culture and cryopreservation in serum/DMSO. Cell isolates are enriched in luminal epithelial cells and are suitable for cell proliferation studies or, when cultured on permissive substrata, for the study of differentiated mammary functions.

DONOR TISSUE FEATURES

- Pregnant bovine mammary parenchyma, <30 months of age
- Animal status: Third trimester of pregnancy

CELL CHARACTERISTICS

Batch number:	11-01-102016
Vial content:	1x10 ⁶ cells
Seeding density:	1.5x10 ⁴ /cm ² (BNM-02), 2x10 ⁵ /cm ² (BNM-03)
Culture medium:	AvantiCell Bovine Mammary Epithelial Proliferation Medium (BNM-02) recommended. AvantiCell Bovine Mammary Epithelial Differentiation Medium (BNM-03) also available
Recovery from frozen:	>80%
Population doubling:	1-2 days
Mycoplasma test:	Negative (by luminescence-based mycoplasma assay)
Virus tests:	Negative for BVD and BSE (by veterinary examination)
Other tests:	Negative for yeast, fungus and bacteria



Cell morphology. Cells in culture were photographed using a phase contrast microscope. Cells cultured in (A) Proliferation medium (BNM-02) or (B) Differentiating medium (BNM-03)

FLOW CYTOMETRY CELL ANALYSIS

Cell Marker	Target Description	Population Positive*
Cytokeratin 18	Glandular epithelial cell marker	Positive
Cytokeratin 14	Undifferentiated epithelial cell marker	Negative
Vimentin	Mesenchymal cell marker	Negative

*Percentage of cells with fluorescence greater than the isotype control background

USES AND RESTRICTIONS

- Store at -150°C. Once thawed do not re-freeze
- For research use ONLY — not suitable for *in vitro* diagnostic use or human or animal treatment
- Potential biohazard — handle with care

Leaders in Cell Culture