

## Bovine Primary Mammary Epithelial Cells

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

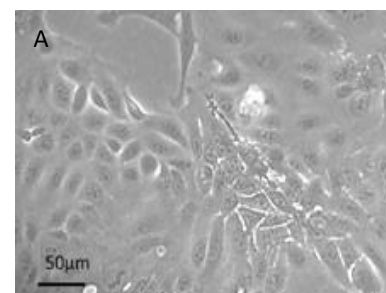
Primary cells isolated from mammary parenchyma of cows by enzymatic digestion and fractionated by differential density gradient centrifugation before culture and cryopreservation in serum/DMSO. Cell isolates are enriched in luminal epithelial cells and are suitable for cell proliferation studies or, 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 <sup>6</sup> cells
Appearance:	Epithelial or coalesced mammospheres
Seeding density:	1.5 x 10 <sup>4</sup> /cm <sup>2</sup> (BNM-02), 2 x 10 <sup>5</sup> /cm <sup>2</sup> (BNM-03)
Population doubling:	1-2 days (proliferation)
Culture medium:	Bovine Mammary Epithelial Proliferation (BNM-02) Mammary Epithelial Cell Differentiation (BNM-03)
Recovery from frozen:	>80%
Mycoplasma test:	Negative (by ELISA)
Virus tests:	Bovine viral diarrhoea (Negative), BSE-free
Other tests:	Yeast, Bacteria, Fungus (Negative)



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