

# Primary Canine Bladder Stromal Fibroblasts (BSF)

SKU: CDS10908 | Category: Primary Cells — Dog

**Validation & Biomarker Data Guide** · Lineage classification: Fibroblast

## 1. Product Overview

Primary Canine Bladder Stromal Fibroblasts (BSF) is a primary cell product from canine Bladder tissue for physiologically relevant in vitro studies. The product is particularly relevant to Urethral cell series and Fibroblasts research. It can support research in cell physiology, signaling, metabolism, toxicology, drug response and cell-based assay development where a primary-cell model is preferred. Culture and passage conditions should follow the product-specific protocol. For research use only.

Primary tissue / source: Bladder tissue | Growth type: Adherent Cells | Tumorigenic status: Normal Cells | Pack size: 1 x 0.5 million cells

## 2. Typical Applications

- Urethral cell series
- Fibroblasts
- Urinary system

## 3. Identity & Phenotypic Marker Panel

A representative identity panel for fibroblast products is shown below. Actual per-lot Certificates of Analysis should be consulted for verified identity data.

| Marker          | Expected Result | Range            |
|-----------------|-----------------|------------------|
| Vimentin        | Positive        | 90–100% positive |
| CD90 (Thy-1)    | Positive        | 70–95% positive  |
| Pan-cytokeratin | Negative / low  | ≤5% (background) |
| CD31            | Negative / low  | ≤3% (background) |

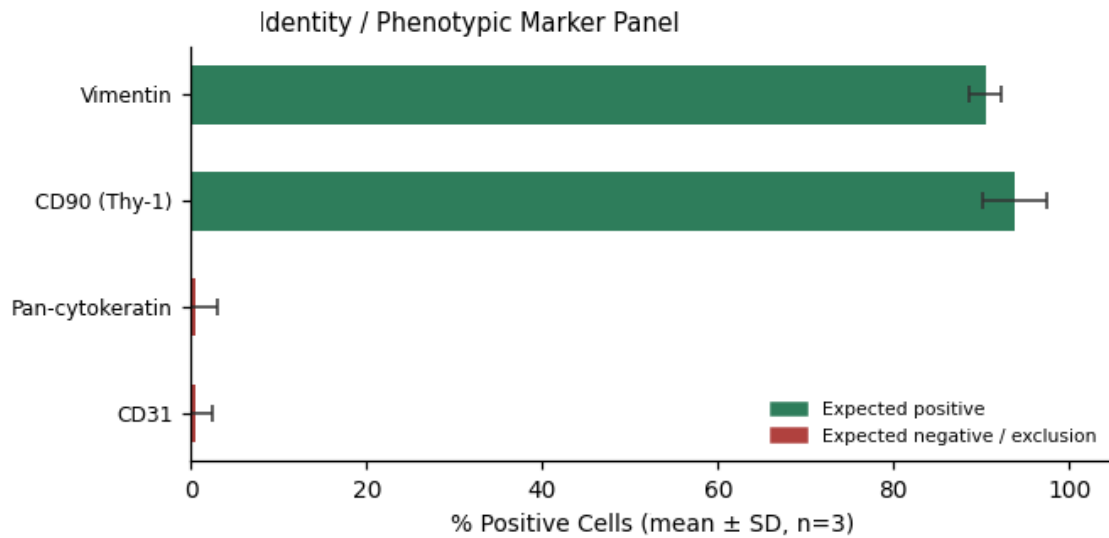


Figure 1. Marker expression profile (mean  $\pm$  SD, n = 3 replicates).

#### 4. Growth Kinetics & Viability

Growth and viability trends over 120 hours in standard culture conditions.

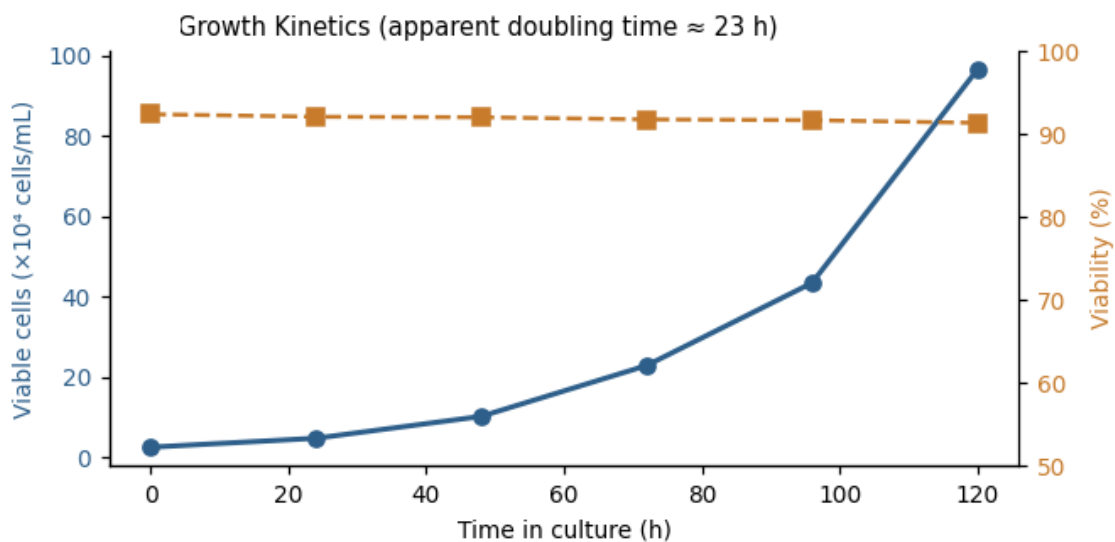


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

#### 5. Functional Validation Assay

**Collagen gel contraction assay:** Fibroblast-populated collagen lattice contraction over 48-72 h to confirm contractile/ECM-remodeling phenotype; alpha-SMA induction under TGF- $\beta$ 1 as secondary marker.

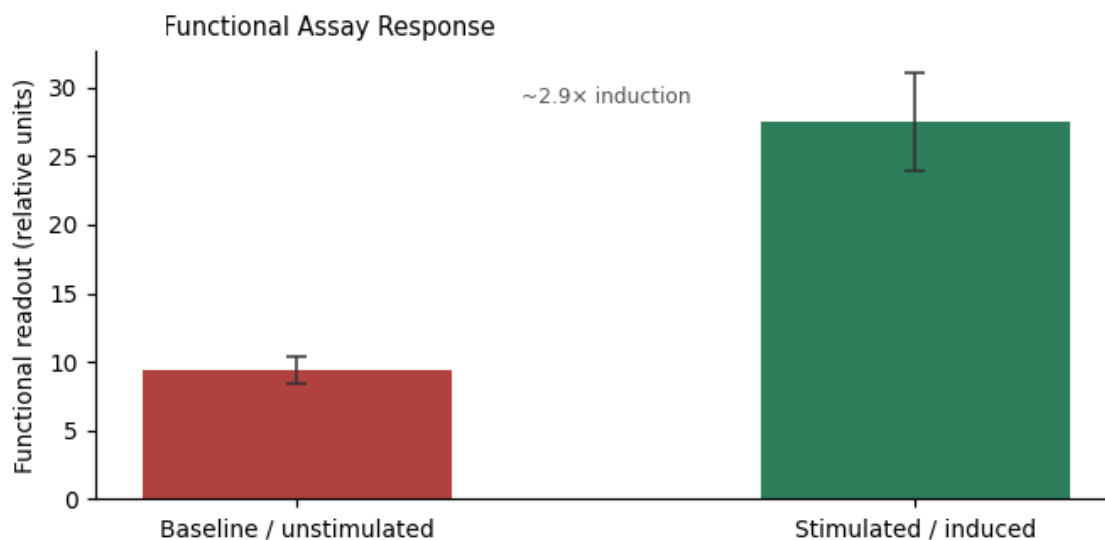


Figure 3. Functional assay readout —  $\sim 2.9\times$  induction over baseline.

## 6. QC Acceptance Criteria

| Acceptance Criterion                                                   | Result                                   |
|------------------------------------------------------------------------|------------------------------------------|
| $\geq 90\%$ Vimentin+ / cytokeratin- by ICC                            | PASS                                     |
| Spindle-shaped adherent morphology confirmed by phase-contrast imaging | PASS                                     |
| Negative for mycoplasma by PCR                                         | PASS                                     |
| Apparent population doubling time                                      | $\approx 23$ hours                       |
| Functional assay outcome                                               | $\sim 2.9\times$ induction over baseline |

## 7. Handling & Culture Notes

- Refer to the product-specific Certificate of Analysis and datasheet for validated culture medium, seeding density, and passaging recommendations.
- As with any primary cell or cell line, confirm mycoplasma-negative status, expected morphology by phase-contrast microscopy, and viability by trypan blue or equivalent dye-exclusion assay at each passage before use in downstream assays.