

# Primary Canine Leydig Cells (LC)

SKU: CDS11229 | Category: Primary Cells — Dog

**Validation & Biomarker Data Guide** • Lineage classification: Reproductive/gonadal cell (granulosa, Sertoli, spermatogonial)

## 1. Product Overview

Primary Canine Leydig Cells (LC) is a primary cell product from canine Testis for physiologically relevant in vitro studies. The product is particularly relevant to Male reproductive cell series and Reproductive system 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: Testis | Growth type: Adherent Cells | Tumorigenic status: Normal Cells | Pack size: 1 x 0.5 million cells

## 2. Typical Applications

- Male reproductive cell series
- Reproductive system

## 3. Identity & Phenotypic Marker Panel

A representative identity panel for reproductive/gonadal cell (granulosa, sertoli, spermatogonial) products is shown below. Actual per-lot Certificates of Analysis should be consulted for verified identity data.

| Marker                                                   | Expected Result | Range            |
|----------------------------------------------------------|-----------------|------------------|
| FSH receptor / Steroidogenic markers (granulosa/Sertoli) | Positive        | 50–88% positive  |
| CD45                                                     | Negative / low  | ≤5% (background) |

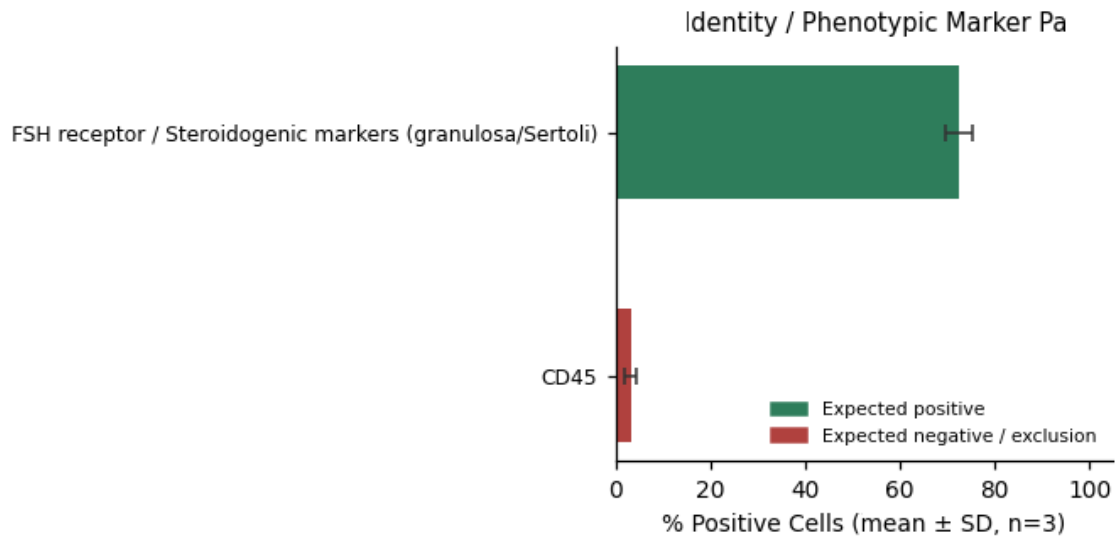


Figure 1. Marker expression profile (mean  $\pm$  SD, n = 3 replicates).

#### 4. Growth Kinetics & Viability

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

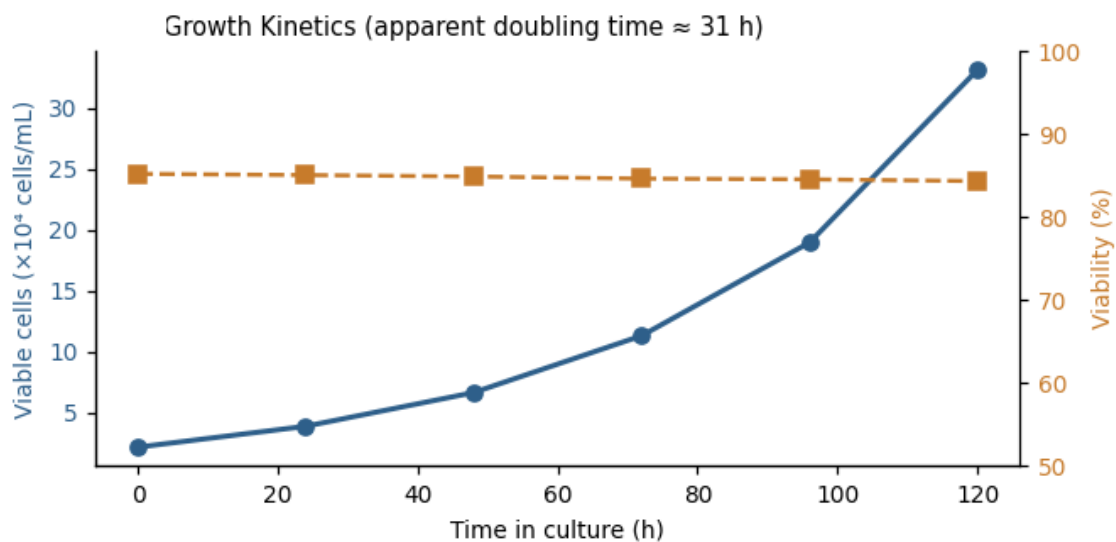


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

#### 5. Functional Validation Assay

**Steroidogenic functional assay:** Hormone-stimulated (FSH/testosterone) steroid output (e.g. estradiol or androgen-binding protein) quantified by ELISA to confirm gonadal functional identity.

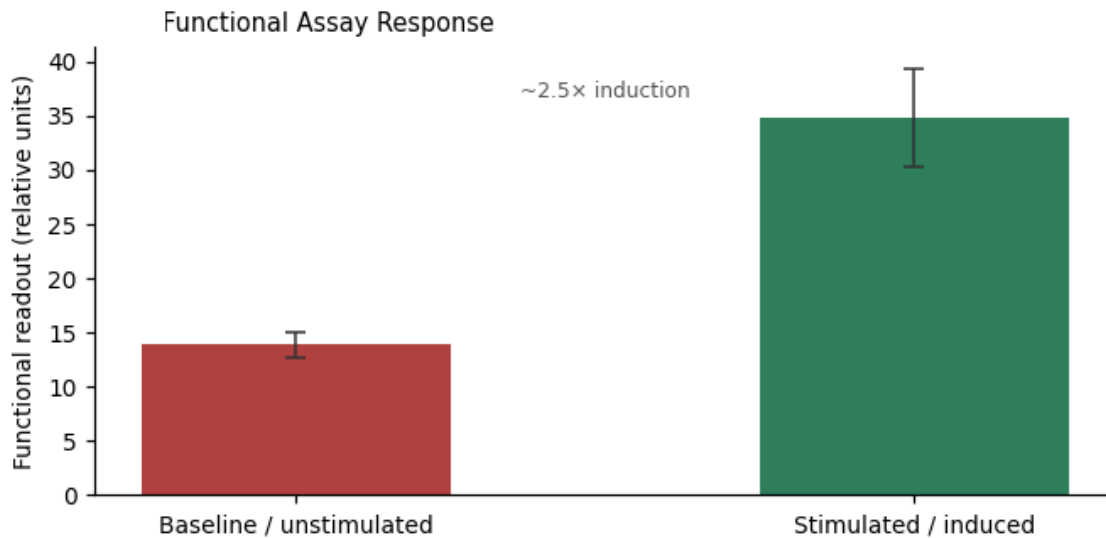


Figure 3. Functional assay readout — ~2.5x induction over baseline.

## 6. QC Acceptance Criteria

| Acceptance Criterion                                | Result                        |
|-----------------------------------------------------|-------------------------------|
| Marker panel consistent with gonadal lineage by ICC | PASS                          |
| Hormone-responsive functional output confirmed      | PASS                          |
| Apparent population doubling time                   | ≈ 31 hours                    |
| Functional assay outcome                            | ~2.5x 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.