Primary Rabbit Retinal Ganglion Cells (RGC)

SKU: CDS11397 | Category: Primary Cells — Rabbit

Validation & Biomarker Data Guide · Lineage classification: Retinal cell (ganglion cell / pigment epithelium, line-dependent)

1. Product Overview

Primary Rabbit Retinal Ganglion Cells (RGC) is a primary cell product from rabbit Retina for physiologically relevant in vitro studies. The product is particularly relevant to Nervous cell series and Ganglion cells 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: Retina | Growth type: Adherent Cells | Tumorigenic status: Normal Cells | Pack size: 1 x 0.5 million cells

2. Typical Applications

- Nervous cell series
- Ganglion cells
- Eye, ear, nose, throat and oral systems

3. Identity & Phenotypic Marker Panel

A representative identity panel for retinal cell (ganglion cell / pigment epithelium, line-dependent) products is shown below. Actual per-lot Certificates of Analysis should be consulted for verified identity data.

Marker	Expected Result	Range
β-III Tubulin / Brn3a (ganglion subtype)	Positive	0–88% positive
RPE65 / ZO-1 (pigment epithelium subtype)	Positive	0–88% positive
CD45	Negative / low	≤5% (background)

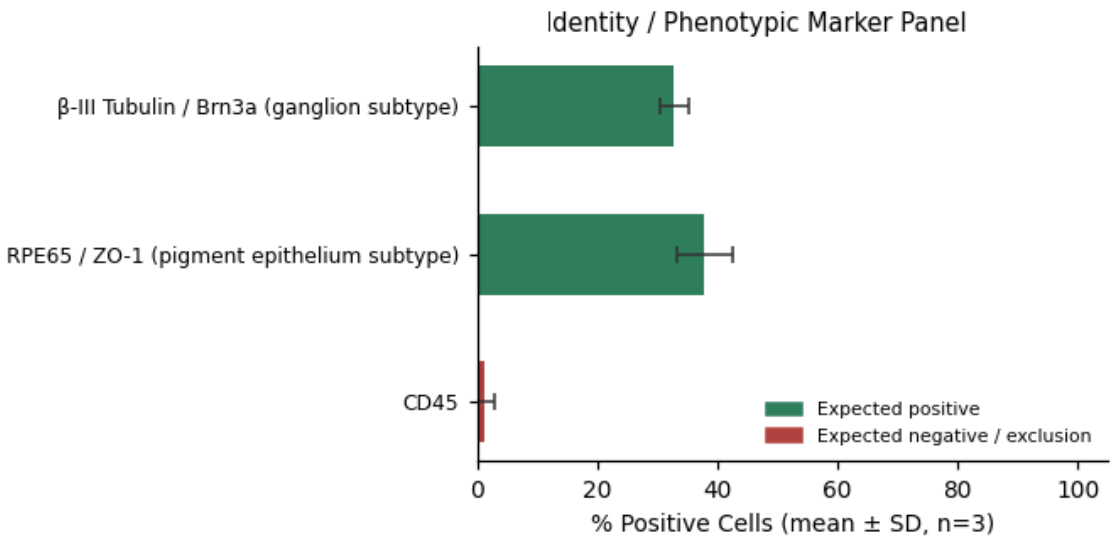


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

4. Growth Kinetics & Viability

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

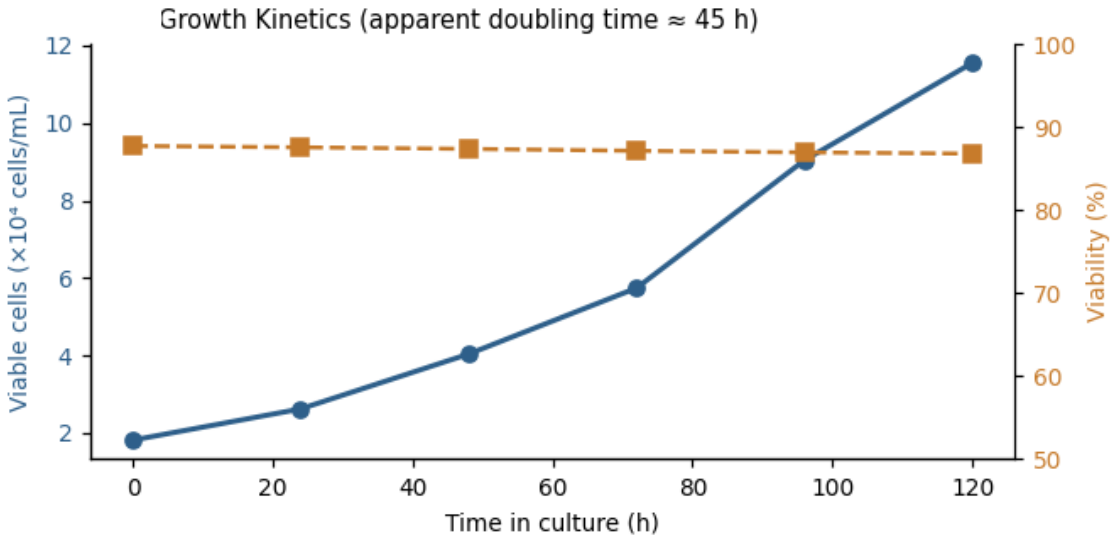


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

5. Functional Validation Assay

Functional identity assay: Subtype-appropriate functional assay: neurite outgrowth/electrophysiology for retinal ganglion cells, or TEER and pigmentation assay for retinal pigment epithelium.

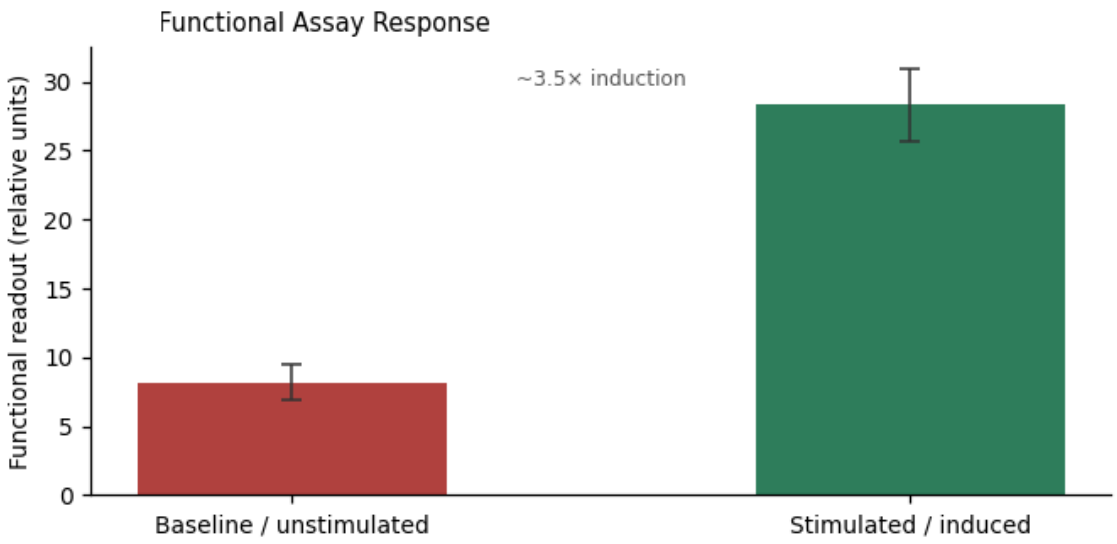


Figure 3. Functional assay readout — ~3.5× induction over baseline.

6. QC Acceptance Criteria

Acceptance Criterion	Result
Marker panel consistent with retinal subtype by ICC	PASS
Morphology consistent with reference image	PASS
Apparent population doubling time	≈ 45 hours
Functional assay outcome	~3.5× 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.