Primary Canine Brain Vascular Pericytes (BVP)

SKU: CDS11973 | Category: Primary Cells — Dog

Validation & Biomarker Data Guide · Lineage classification: Pericyte

1. Product Overview

Primary Canine Brain Vascular Pericytes (BVP) is a primary cell product from canine Brain for physiologically relevant in vitro studies. The product is particularly relevant to Nervous cell series and Pericytes 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: Brain | Growth type: Adherent Cells | Tumorigenic status: Normal Cells | Pack size: 1 x 0.5 million cells

2. Typical Applications

- Nervous cell series
- Pericytes
- Cerebral and nervous systems

3. Identity & Phenotypic Marker Panel

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

Marker	Expected Result	Range
NG2 (CSPG4)	Positive	65–92% positive
PDGFR-β	Positive	65–92% positive
α-SMA	Positive	40–75% positive
CD31	Negative / low	≤5% (background)

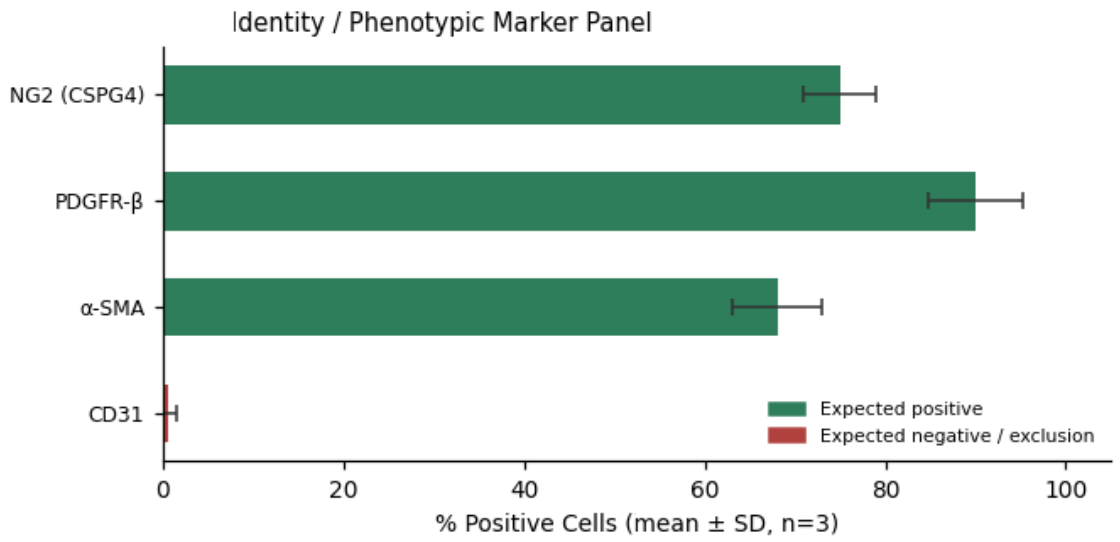


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

4. Growth Kinetics & Viability

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

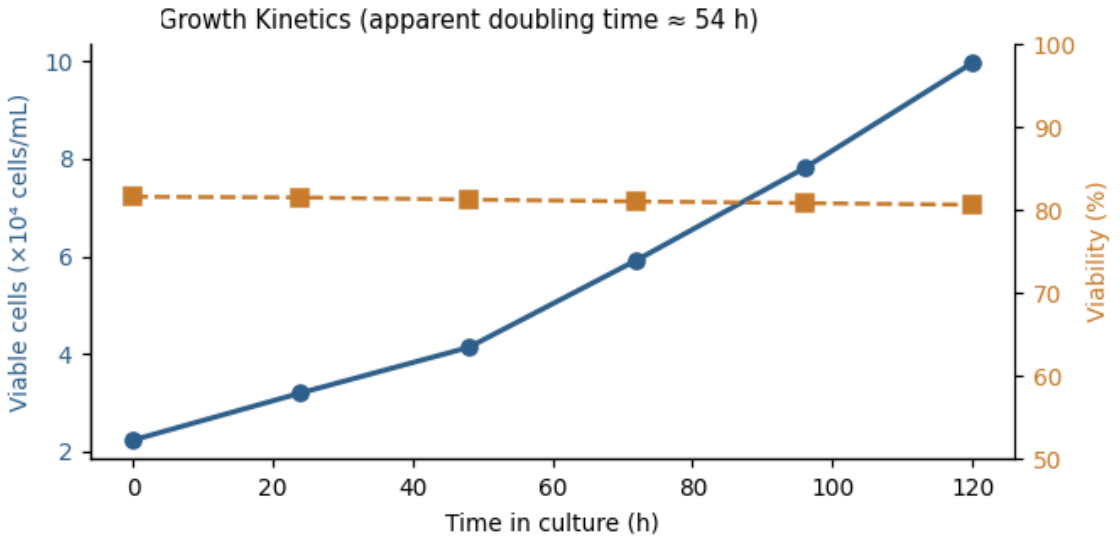


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

5. Functional Validation Assay

Endothelial co-culture stabilization assay: Co-culture with endothelial cells in a tube-formation assay to assess vessel-stabilizing / mural-cell function.

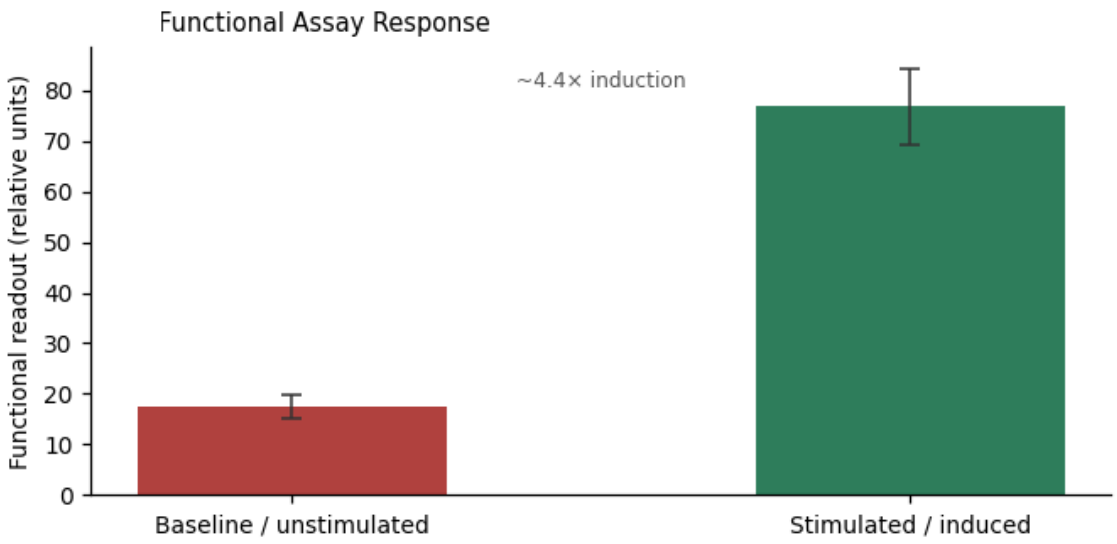


Figure 3. Functional assay readout — ~4.4× induction over baseline.

6. QC Acceptance Criteria

Acceptance Criterion	Result
≥65% NG2+/PDGFR-β+ by ICC	PASS
CD31-negative confirming non-endothelial identity	PASS
Apparent population doubling time	≈ 54 hours
Functional assay outcome	~4.4× 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.