

EA.hy926 Human Umbilical Vein Cell Fused with A549 Cell Line

SKU: CDS3169 | Category: Cell Lines — Other Established Cell Lines

Validation & Biomarker Data Guide · Lineage classification: Lung carcinoma cell line

1. Product Overview

EA.hy926 Human Umbilical Vein Cell Fused with A549 Cell Line is an established cell line for controlled in vitro research. It can support cell biology, growth and viability studies, signaling and pathway research, drug-response testing, screening and assay development under validated culture conditions. The model provides a reproducible cellular system for basic and translational research. For research use only.

Growth type: Adherent Cells | Tumorigenic status: Tumor Cells | Pack size: 1 x 1 million cells

2. Typical Applications

- Cell-based assay development, pathway and mechanism studies, biomarker characterization, and comparative functional testing consistent with this lineage.

3. Identity & Phenotypic Marker Panel

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

Marker	Expected Result	Range
TTF-1	Positive	40–80% positive
Pan-cytokeratin	Positive	80–98% positive
CK7	Positive	45–85% positive
Vimentin	Negative / low	≤30% (background)

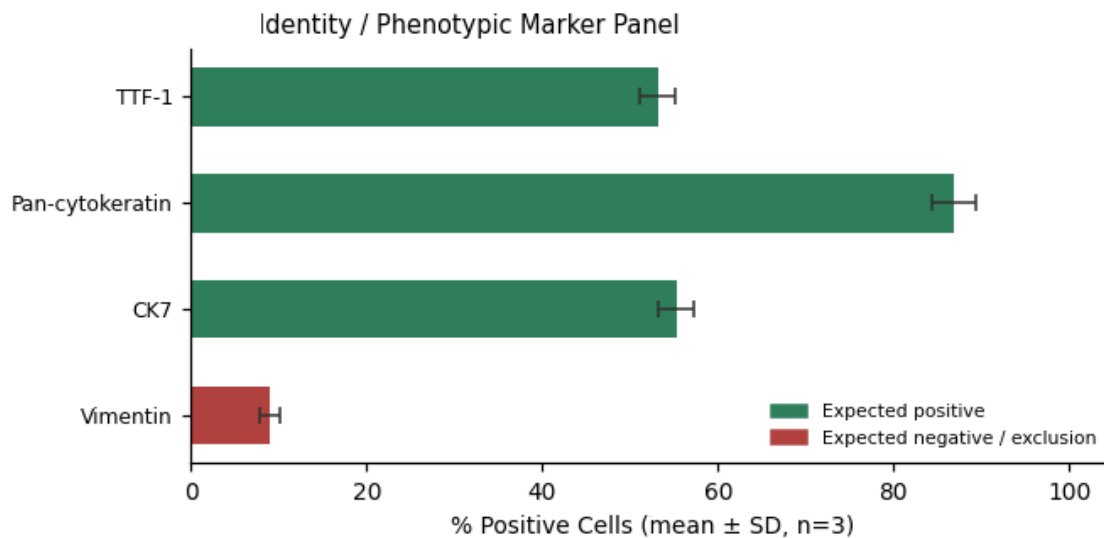


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

4. Growth Kinetics & Viability

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

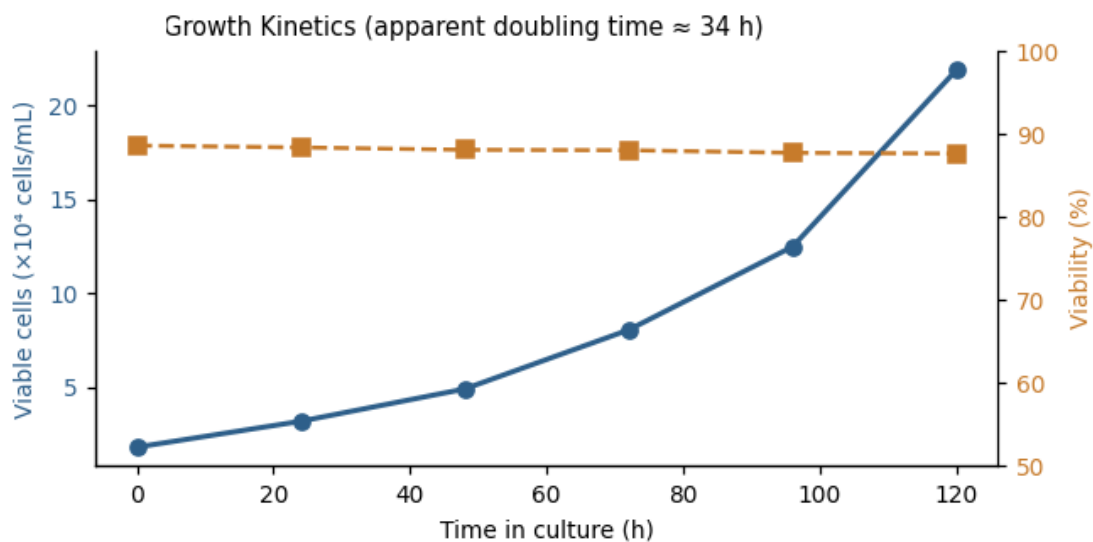


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

5. Functional Validation Assay

Proliferation / drug-sensitivity assay: MTT/CellTiter-Glo viability assay across a reference cytotoxic compound (e.g. cisplatin) dose range to generate an IC50 curve confirming assay-ready drug responsiveness.

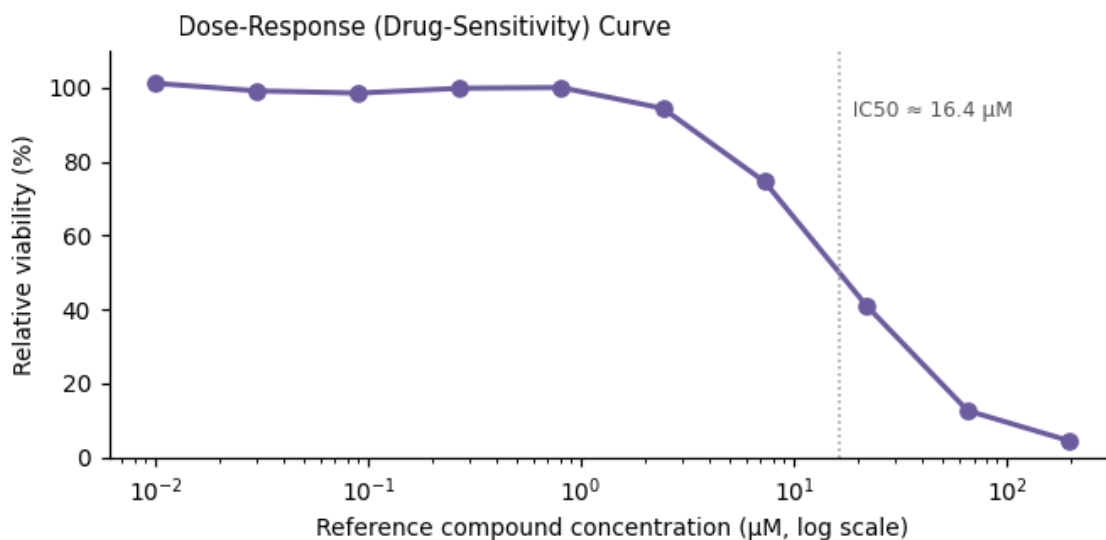


Figure 3. Functional assay readout — IC₅₀ ≈ 16.4 μM.

6. QC Acceptance Criteria

Acceptance Criterion	Result
Authenticated by STR profiling	PASS
≥70% pan-cytokeratin+ by ICC	PASS
IC ₅₀ within historical reference range for line	PASS
Apparent population doubling time	≈ 34 hours
Functional assay outcome	IC ₅₀ ≈ 16.4 μM

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.