Human Liver Cell Line, #HL-7702[L-02]

SKU: CDS10054 | Category: Cell Lines — Other Established Cell Lines

Validation & Biomarker Data Guide · Lineage classification: Normal/primary adherent cell (general)

1. Product Overview

Human Liver Cell Line, #HL-7702[L-02] 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.

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

2. Typical Applications

- 1. Cancer Biology Research
- Mechanistic Studies
- Gene Function Studies
- Signal Transduction
- 2. Drug Discovery and Development
- Screening of Anticancer Compounds
- IC50/EC50 Studies
- Mechanism of Action
- Combination Therapies
- 3. Assay Development
- ELISA and Immunoassays
- Flow Cytometry Assays

3. Identity & Phenotypic Marker Panel

A representative identity panel for normal/primary adherent cell (general) products is shown below. Actual per-lot Certificates of Analysis should be consulted for verified identity data.

Marker	Expected Result	Range
Lineage-specific marker	Positive	65–95% positive

Marker	Expected Result	Range
panel (product-specific)		
CD45	Negative / low	≤8% (background)

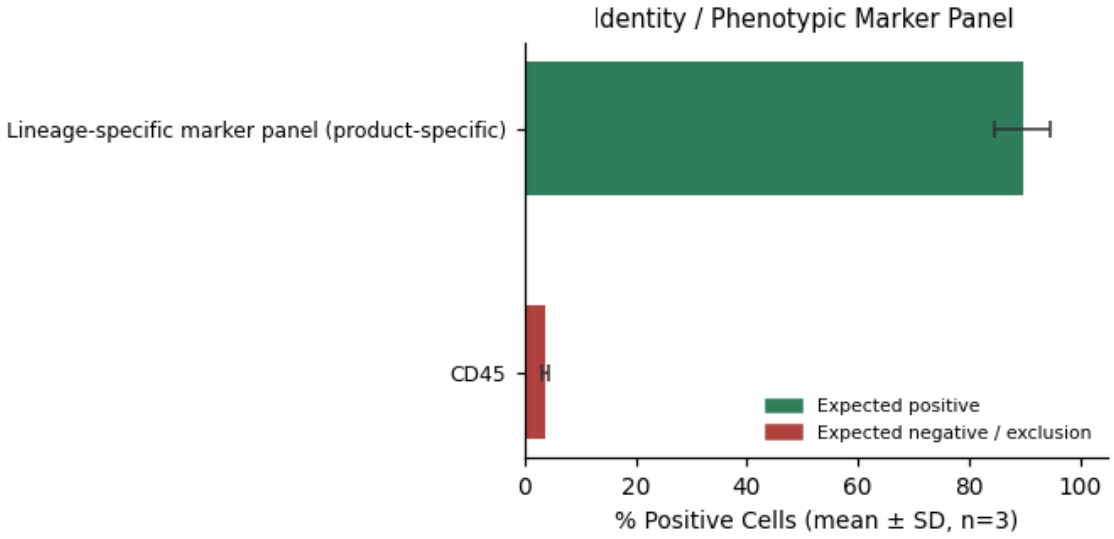


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

4. Growth Kinetics & Viability

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

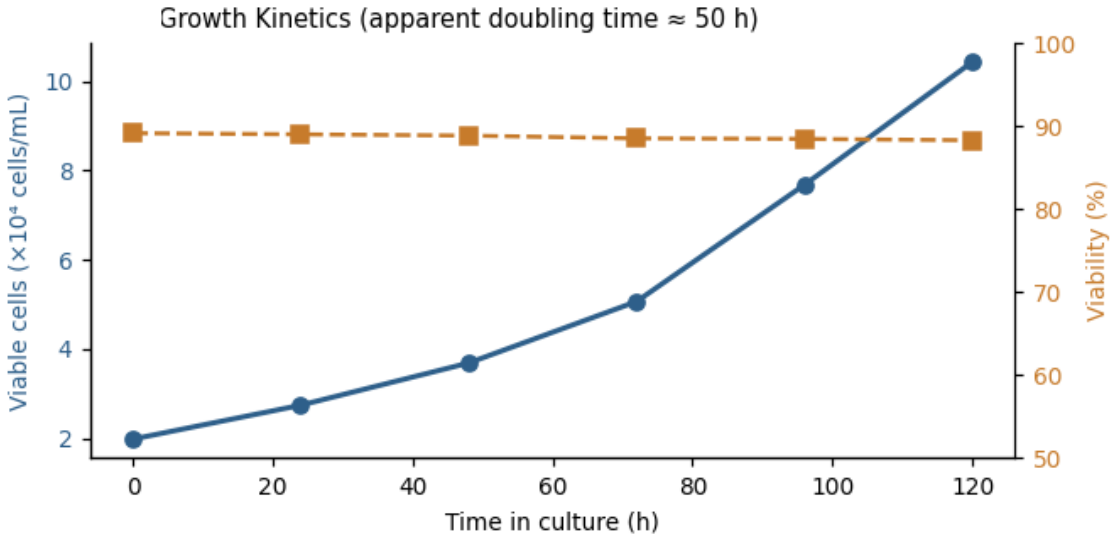


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

5. Functional Validation Assay

Lineage-specific functional assay: Functional assay appropriate to tissue of origin (e.g. differentiation, secretion, or barrier-formation assay) to confirm the cell retains expected physiological behavior.

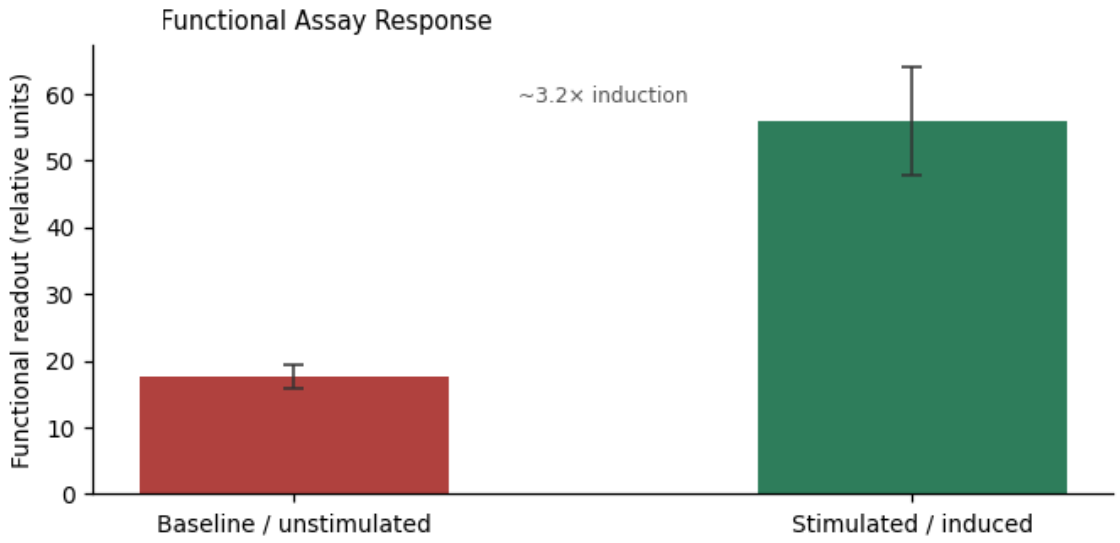


Figure 3. Functional assay readout — ~3.2× induction over baseline.

6. QC Acceptance Criteria

Acceptance Criterion	Result
Marker panel consistent with lineage reference sheet	PASS
Morphology consistent with reference image by phase-contrast microscopy	PASS
Negative for mycoplasma by PCR	PASS
Apparent population doubling time	≈ 50 hours
Functional assay outcome	~3.2× 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.