

# Human Peripheral Blood Lymphocytes, #ARH-77

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SKU: CDS10506 | Category: Cell Lines — Other Established Cell Lines

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

## 1. Product Overview

Human Peripheral Blood Lymphocytes, #ARH-77 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: Peripheral Blood Lymphocytes | 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 panel (product-specific) | Positive        | 65–95% positive  |
| CD45                                             | Negative / low  | ≤8% (background) |

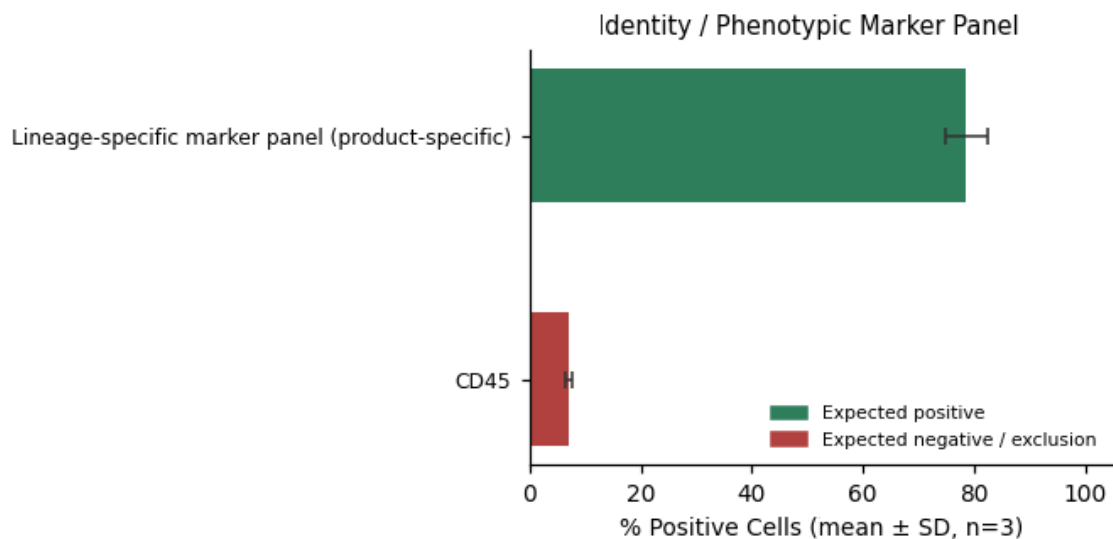


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

#### 4. Growth Kinetics & Viability

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

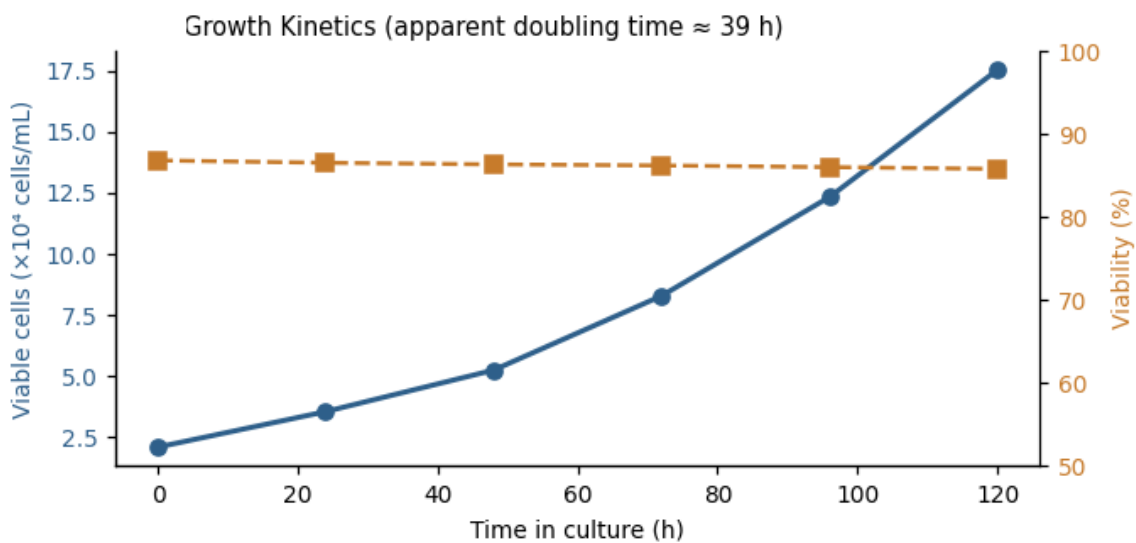


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

## 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.

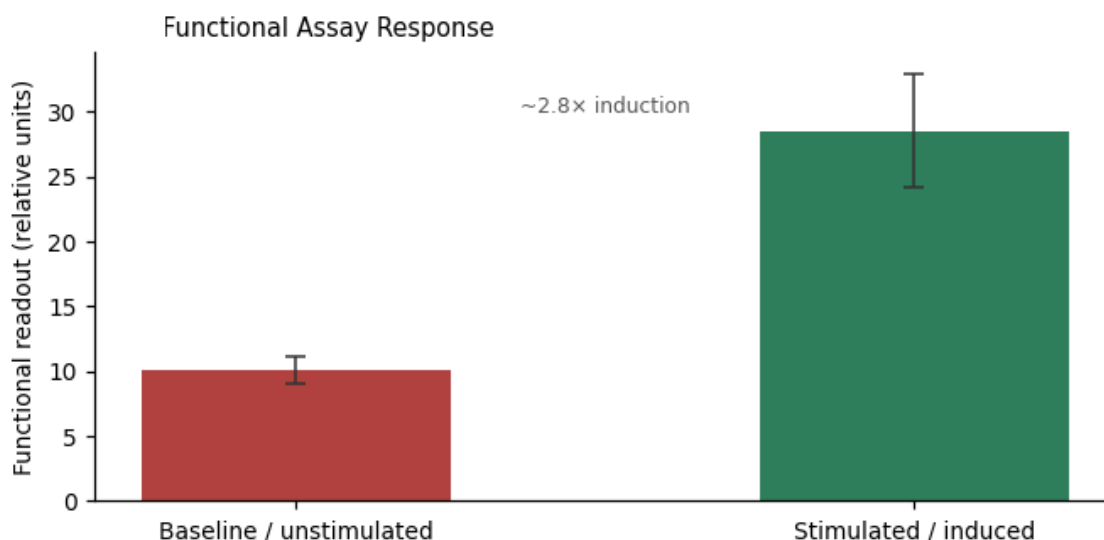


Figure 3. Functional assay readout — ~2.8x induction over baseline.

## 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                                       | ≈ 39 hours                    |
| Functional assay outcome                                                | ~2.8x 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.