

MR1 Mouse B Lymphocyte Hybridoma Cell Line

SKU: CDS3916 | Category: Cell Lines — Hybridoma Cell Lines

Validation & Biomarker Data Guide · Lineage classification: Hybridoma

1. Product Overview

MR1 Mouse B Lymphocyte Hybridoma Cell Line is a hybridoma cell line for in vitro research and antibody-related workflows. It can support cell culture, clone characterization, antibody production studies, assay development and process optimization under validated culture conditions. For research use only.

Growth type: Suspension 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 hybridoma products is shown below. Actual per-lot Certificates of Analysis should be consulted for verified identity data.

Marker	Expected Result	Range
Intracellular Ig (heavy/light chain)	Positive	70–98% positive
Non-secretor background clones	Negative / low	≤5% (background)

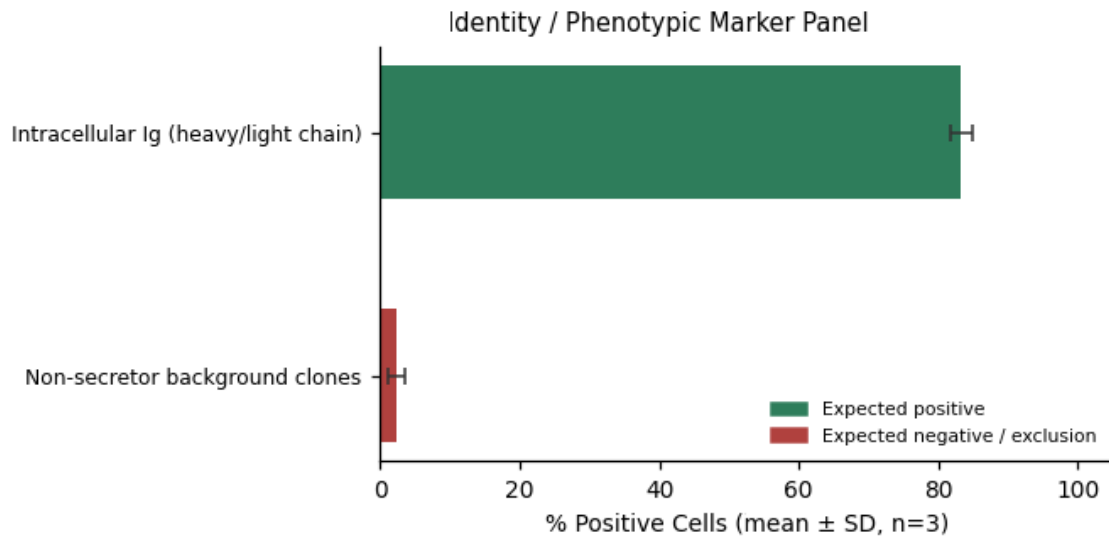


Figure 1. Marker expression profile (mean ± SD, n = 3 replicates).

4. Growth Kinetics & Viability

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

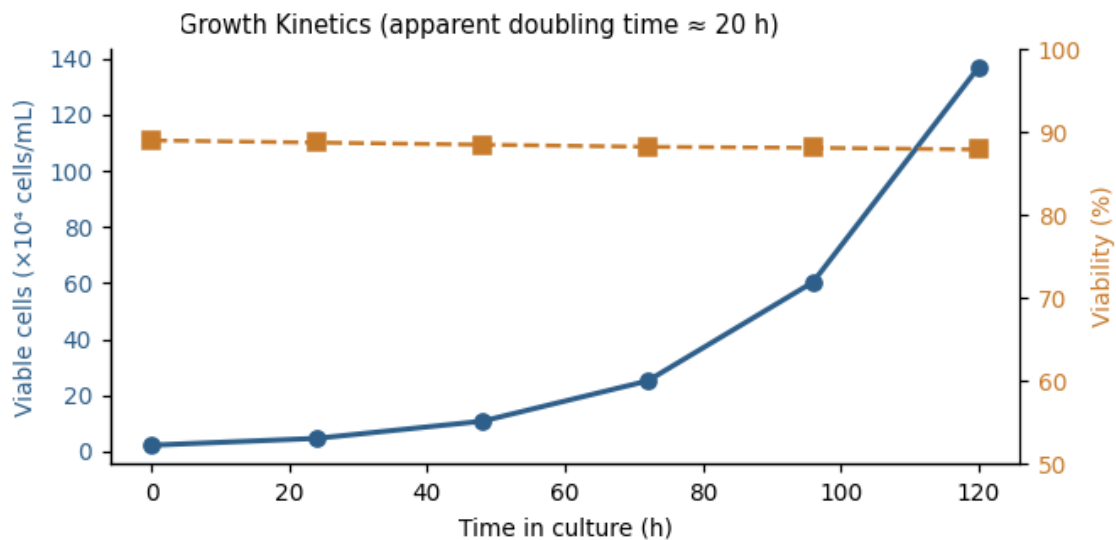


Figure 2. Growth curve (viable cell density, left axis) and viability trend (right axis).

5. Functional Validation Assay

Antibody secretion / titer assay: Culture supernatant tested by sandwich ELISA and isotype-specific assay to confirm monoclonal antibody titer, isotype, and target-antigen specificity.

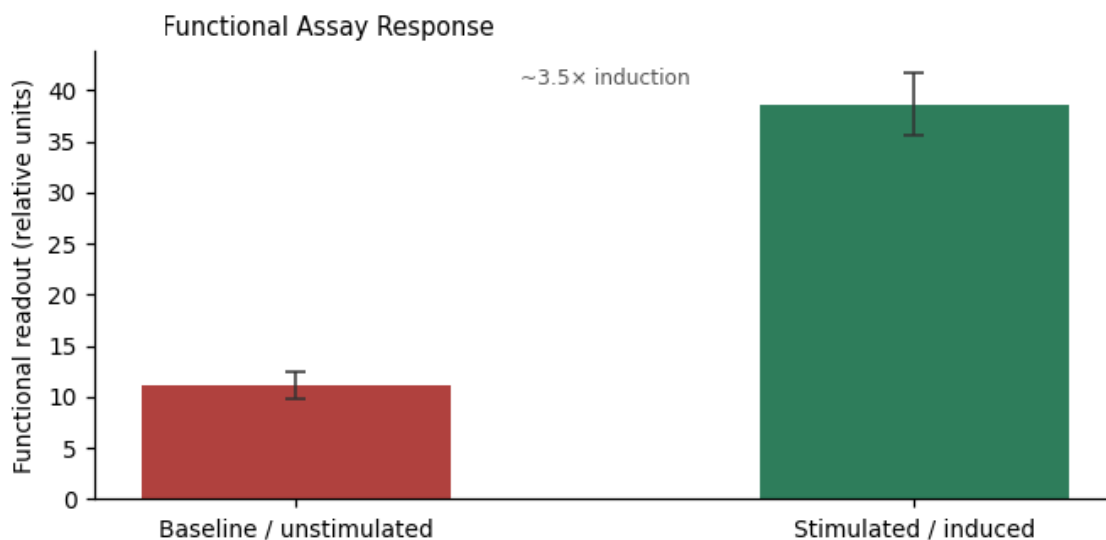


Figure 3. Functional assay readout — ~3.5× induction over baseline.

6. QC Acceptance Criteria

Acceptance Criterion	Result
Detectable antibody titer by ELISA (lot-specific reference range)	PASS
Confirmed isotype by isotyping strip/ELISA	PASS
Karyotype/STR consistent with parental fusion partner	PASS
Apparent population doubling time	≈ 20 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.