

Cell Line Designation: LP-1

AddexBio Catalog No. C0003006

Cell Line Description:

Disease: Multiple Myeloma

Origin: Established from the peripheral blood

Species: Home sapiens

Tissue: Blood

Properties: Single, elongated, snake-like cells, suspension

Patient: Female, 56 yrs of age

Complete Medium: AddexBio-Formulated RPMI-1640 (C0004-01) + 10% FBS

Subculture Procedure: Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at $2 \text{ to } 3 \times 10^5$ viable cells/ml. Maintain cell density between $2 \text{ to } 3 \times 10^5$ and $1 \text{ to } 2 \times 10^6$ viable cells/ml, culture at 5% CO₂; 37°C.

Medium Renewal: Add fresh medium (20-30% by volume) every 2-3 days.

Freezing Medium: Complete culture medium supplemented with 5% (v/v) DMSO

Additional Information: Additional product and technical information can be obtained from the catalog references and the Addexbio Technical Information site at www.addexbio.com, or by email at customersupport@addexbio.com.

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. laboratory safety is discussed in the following publication: Biosafety in Microbiological and Biomedical Laboratories, 5th ed. HHS Publication No. (CDC) 93-8395. U.S. Department of Health and

Human Services, Centers for Disease Control and Prevention. Washington DC: U.S. Government Printing Office; 2007. The entire text is also available online at www.cdc.gov/od/ohs/biosafety/bmbl4/bmbl4toc.htm

Use Restrictions: These cells are distributed for research purposes only. Addexbio does not recommend third party distribution of this cell line, as this practice has resulted in the unintentional spreading of contaminated cell lines.

Handling Procedure for Frozen Cells: To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

Safety Precaution: Addexbio highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
3. (OPTIONAL) Transfer the vial contents to the centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125xg for 5 to 7 minutes.
4. Resuspend cell pellet with the recommended complete medium (if step 3 was performed) and dispense the cell suspension into a new culture flask. It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the complete growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0-7.6).
5. Incubate the culture at 37°C in a suitable incubator. A 5% CO₂ in air atmosphere is recommended.

References for LP-1 cells:

1. Guo, C., Hou, J., Chen, Y. B., Jin, H. Y., Fu, W. J., Yuan, Z. G., and Wang, D. X. [The effect of cyclin D2 shRNA on the proliferation and apoptosis of LP-1 cell]. *Zhonghua Xue Ye Xue Za Zhi*, 27: 666-669, 2006.
2. Kerros, C., Brood, I., Sola, B., Jauzac, P., and Allouche, S. Reduction of cell proliferation and potentiation of Fas-induced apoptosis by the selective kappa-opioid receptor agonist U50 488 in the multiple myeloma LP-1 cells. *J Neuroimmunol*, 220: 69-78.
3. Liu, Y., Xu, Q., and Chen, Z. [Purification and characterization of antifungal peptide LP-1]. *Wei Sheng Wu Xue Bao*, 39: 441-447, 1999.
4. Neumann, C., Zehentmaier, G., Danhauser-Riedl, S., Emmerich, B., and Hallek, M. Interleukin-6 induces tyrosine phosphorylation of the Ras activating protein Shc, and its complex formation with Grb2 in the human multiple myeloma cell line LP-1. *Eur J Immunol*, 26: 379-384, 1996.
5. Pegoraro, L., Malavasi, F., Bellone, G., Massaia, M., Boccadoro, M., Saglio, G., Guerrasio, A., Benetton, G., Lombardi, L., Coda, R., and et al. The human myeloma cell line LP-1: a versatile model in which to study early plasma-cell differentiation and c-myc activation. *Blood*, 73: 1020-1027, 1989.
6. Sakaguchi, K., Koide, N., Kondow, H., Tanabe, T., Jitoku, M., Arima, T., and Nagashima, H. Hepatocyte plasma membrane antigens. II. Characterization of liver-specific membrane lipoprotein (LP-1) and Tamm-Horsfall glycoprotein (THGP) like antigens (hepatic THGP) on the plasma membrane of Chang liver cell. *Gastroenterol Jpn*, 18: 339-345, 1983.



Product Information Sheet for Addexbio

Lot Specific Information Sheet for AddexBio Cat #: C0003006

Lot Number: 0068223

Designation: LP-1 CELLS

Total Cells/mL: $>1 \times 10^6$

Expected Viability: 60.0-75.1%

Ampule Passage #: 3

Dilute Ampule Content: 1:10 (T-25) or 1:15 (T-75)

Volume/Ampule: 1 mL

A T-25 setup at a dilution of 1:10, using culture medium as described in the product information sheet, reaches approximately 60-70% confluence within 24 to 48 hours.