The Next Generation LAMPIRE® Cell Culture Bags

An Elegantly Simple Approach To Growing Cells

-- Basic Cell Culturing Protocol--

Below is a fundamental protocol for use when culturing cells in the Lampire Cell Culture Bags. This protocol is very basic and may require modifications to adapt to your specific cell lines and cell culture applications.

As with standard cell culture methods, all work involving the Lampire Cell Culture Bags should be performed in a biosafety cabinet using sterile technique.

- Remove the Lampire Cell Culture Bag from outer protective bag. The bags have been presterilized and are ready for use; NO PRE-WETTING WITH MEDIA IS REQUIRED.
- Calculate the volume of seed culture required to seed the bags (typically 1 to 3x10⁵ cells/ml). For example, a 1L bag would require 1x10⁵ to 3x10⁵ cells X 1000ml or 1x10⁸ to 3x10⁸ cells total.



- 3. Lay the bag flat on the clean biosafety cabinet surface and open the filling port.
- 4. Fill the bag with the pre-warmed cell culture media of choice using an oversized syringe or pouring container. Fill to the specified bag volume minus the volume of seed culture to be used. For example, if using 100ml of seed culture, a 1 liter Lampire Cell Culture Bag would be filled with 900ml of media. Media formulation will be dictated by cell type.
- 5. Add pre-determined volume of seed culture and replace the filling port cap. There is no need to gas the bag.
- 6. Place the bag in an incubator at desired temperature and CO₂ percentage. (Typically 37°C and 5-7% CO₂). THERE IS NO NEED FOR ROCKERS OR TUBING TO SUPPLY GAS.
- 7. Cell counts and cell viability may be checked at intervals determined by the customer, typically every 3 days. Observe bags for leaks or contamination at this time as well.
- 8. Cells may be observed while in the bag with the use of an inverted microscope.
- 9. Gently massage the bags when routinely checking cell growth so that cells are resuspended within the media. Once re-suspended, a sample may be taken via the filling port.
- 10. Once desired cell density and viability are attained, remove the culture from the bag and harvest cells or supernatant as necessary. (If desired, the durability of the bag is adequate for centrifugation at 3500 Xg.)
- 11. Dispose of the Lampire Cell Culture Bags in a responsible manner. The bags are not recommended for reuse as this poses a contamination risk.

Lampire Cell Culture Bags are easy from start to finish. Easy to fill and observe cell growth. Easy to maintain and harvest. And with their compact size and ability to grow more cells faster, with longer cell viability, in fewer containers, they are easy on the environment too.