

BioWhittaker® UltraDOMA™ -PF Serum-free, Protein-free Medium

Instructions for Use

Introduction

UltraDOMA™ -PF Medium is a protein-free formulation designed for use with hybridoma cell lines of murine, human or chimeric origin. UltraDOMA™ -PF Medium is totally defined and does not contain peptides or tissue extracts. UltraDOMA™ -PF Medium is designed for lab scale or industrial scale use. The medium is complete and is available as a 1X liquid (Cat. No. 12-727) or powder (Cat. No. 15-727). L-glutamine and HEPES buffer are included in the formulation. The use of UltraDOMA™ -PF Medium significantly simplifies down-stream processing since all proteins present in the culture supernatant are produced by the cell.

Partial list of cell types cultivated with UltraDOMA™ -PF Medium:

Cell Type

Murine hybridomas
NS-1 derived myelomas
SP-2 derived myelomas
Human hybridomas (with 0.5% FBS)
Rat hybridomas
Some transfected Chinese Hamster Ovary (CHO) cell lines
Human lymphoid origin cells
Murine lymphoid origin cells

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I. Preparation of UltraDOMA™ -PF Medium from Powder

1. Powdered media mixtures are extremely hygroscopic and must be protected from atmospheric moisture. The entire contents of each package should be used immediately after opening. Preparing medium in concentrated form is not recommended. Some free-base amino acids have low solubility coefficients and insoluble salt complexes may precipitate in concentrated solution.
2. Measure out 90% of the final required volume of Water for Cell Culture

Applications (Cat. No. 17-724). For example, 900 ml for final volume of 1000 ml. Select an appropriate container as close in size to the final volume as possible. Water temperature should be 15°C -20°C.

3. While gently stirring the water, add the UltraDOMA™ -PF Medium powder and rinse the empty package with a small amount of Water for Cell Culture Applications.
4. Allow the mixture to stir for 20-30 min. THE pH OF UltraDOMA™ -PF Medium IS SELF ADJUSTING. THE ADDITION OF SODIUM BICARBONATE IS NOT REQUIRED. PLEASE DO NOT ATTEMPT TO ADJUST THE pH OF THE PRODUCT. The final pH of UltraDOMA™ -PF Medium should be between 7.0 and 7.6.
5. Add additional Water for Cell Culture Applications to bring the medium to final volume.
6. Sterilize immediately by filtration, using a membrane with a porosity of 0.22 microns or less. To reduce CO₂ loss, positive pressure (3-15 psi) should be used for filtration. An inert gas, such as nitrogen, should be used as a pressure source. CO₂ is not recommended as it will alter the pH of the medium.
7. Aseptically dispense the UltraDOMA™ -PF Medium into sterile containers. Store the liquid, refrigerated at 2°C -8°C. Protect the liquid from long-term exposure to intense light.

II. Growth of Cells in UltraDOMA™ -PF Medium

1. Adaptation of cells to UltraDOMA™ -PF Medium may not be necessary. If adaptation is required, we recommend an initial split ratio of 1:2 into UltraDOMA™ -PF Medium followed by sequential splits of 1:5 until the culture is adapted to the new medium. During the weaning process, the cell concentration should be maintained above 3.0 x 10⁵ /ml.

2. The recommended seeding density for cells adapted to UltraDOMA™-PF Medium is 5.0×10^4 cells/ml. The cultures should be incubated at 35°C -37°C in an atmosphere composed of 95% air, 5% CO₂.

Storage

2°C to 8°C, dark

Product Use Statement

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or *in vitro* procedures.

Ordering Information

Catalog Number	Description	Size
12-727F	UltraDOMA™-PF Protein-free Medium 1 x liquid; with L-glutamine	500 ml
15-727D	UltraDOMA™-PF Protein-free Powdered Medium	1 x 10 L
15-727F	UltraDOMA™-PF Protein-free Powdered Medium	1 x 50 L

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