

Serum-Free Hybridoma Medium, Liquid

With D-glucose
 With sodium bicarbonate
 With HEPES
 With L-glutamine
 With Pluronic® F68
 For the adherent culture of Hybridoma cell

Catalog Number **SF 401**
 Storage Temperature 2~8°C

Product Description

Serum-Free Hybridoma Media are liquid media formulated to support suspension culture of hybridoma cells. Serum-Free Hybridoma Media formulations include the minimal amount of protein required for cell growth. Serum-Free Hybridoma Media differs from normal (serum supplemented) media in its amino acid, vitamin, and mineral composition, and includes peptides, fatty acids, and growth factors as substitutes to serum. Hybridoma cells that had been formerly cultured in serum supplemented media normally require adjustment period in order to successfully propagate in Serum-Free Hybridoma Medium. Adjustment periods can be shortened when adjustment methods are properly administered.

SF 401 contains D-glucose, HEPES, sodium bicarbonate, L-glutamine, Pluronic® F-68, and thus does not require further supplements. **SF 401** vary in their compositions and consequently yield different effects on different cell lines. The optimal product for a certain cell type can only be confirmed through direct application. **SF 401** contains the minimal amount of ingredients of animal origin, and is therefore appropriate for the study and production of medical quality recombinant proteins, which is the final product of cell cultivation. In selecting the appropriate culture environment of Serum-Free Medium, (1) the origin of the cell host (the kind of cell), (2) the type of culture container to be used (tissue flask, multiplayer flasks, roller bottle, spinner flasks, or bioreactors), and (3) the characteristics of the cell host, are important factors to be considered.

Storage/Stability

The Serum-Free medium should be stored at 2~8°C in the dark. Deterioration of the liquid medium may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. The nature of supplements added may affect storage conditions and shelf life of the medium. Product label bears expiration date.

Instructions for Use

(1) Nutritional requirements can change in accordance with each gene expression system, (2) recombinant protein expression can be increased by supplementing polyamine supplement (**LS 018-01**), fatty acid supplement (**LS 017-01**), sodium butyrate (**LS 033-01**), (3) when using a CO₂ incubator, the pH of the cell culture should be adjusted by controlling the NaHCO₃ concentration, (4) when using a spinner flask, leave the cover 1/4 open to allow aeration.

Biological Performance Characteristics

The growth-promoting capacities of the Serum-Free Hybridoma media are tested in a liquid medium using Hybridoma cell. Growth rates are examined through three subculture. Cells are counted and growth is plotted as a logarithmic function of time in culture, and seeding efficiency, doubling time, and final cell densities are determined. During the testing period cultures are examined microscopically for a typical morphology and evidence of cytotoxicity.

Precautions

Serum-Free Hybridoma media are only used *In Vitro*, and are sensitive to light and heat. Adhering to the following suggestions can increase the product shelf life. (1) Limit light exposure, (2) minimize its exposure to room temperature (3) store in a darkroom at 2~8°C, (4) use in small amounts at a time.

Product Profile	
Appearance	Red transparent solution
pH at RT	7.0 ~ 7.6
Osmolality	332 ~ 368 mOsm/kg H ₂ O
Endotoxin	≤ 1.0 EU/ml
Sterility	Sterilized by 0.2 μm filtration system. Sterility tests are performed in accordance with protocols described in USP.