AventaCell BioMedical Corp.

UltraGRO™-Advanced GI Cell Culture Supplement

Description

UltraGRO™-Advanced GI cell culture supplement is a gamma irradiated viral inactivated, fibrinogen depleted, non-xenogeneic, animal serum-free supplement for replacing FBS (fetal bovine serum) to support cell expansion from research and clinical trials to commercial application. UltraGRO™-Advanced GI contains abundant growth factors and cytokines necessary for research or industrial cell growth and proliferation of multiple cell types (e.g. MSCs) in research-scale or industrial-scale production.

Product	Catalog No.	Spec.	Storage	Shelf Life*
UltraGRO™-Advanced GI (GMP grade)	HPCFDCGLI05	50mL	Store at -20°C	24 months
	HPCFDCGLI10	100mL		
	HPCFDCGLI50	500mL		

*Shelf life duration is determined from Date of Manufacture, continuously stored frozen in original bottle.

Application

For human *ex-vivo* tissue and cell culture processing applications.

Important information

- Insoluble particles may form in thawed UltraGRO™-Advanced GI. Published research has shown that particles will not alter the perfomance of the product.
- Insoluble particles may form in thawed UltraGRO™-Advanced GI, it is recommended to centrifuge at 3,400 xg for 3~5 minutes.
- Filtering the completed medium (e.g. 5%), after UltraGRO™-Advanced GI is diluted in the basal medium, will not affect UltraGRO™-Advanced GI supplemented cell culture performance. However, 0.22 µm filtering is NOT recommended for the 100% UltraGRO™-Advanced GI concentrate, as this may reduce 5% UltraGRO™-Advanced GI cell culture performance.
- Repeated freeze-thaw cycles should be avoided as they will cause an increase in insoluble percipitates and resulting potential decrease in UltraGRO™-Advanced GI performance.

Safety information

- Follow the handling instructions outlined in the Material Safety Date Sheets (MSDSs). Wear appropriate protective eyewear, clothing, and gloves.
- UltraGRO™-Advanced GI is a cell culture supplement collected from healthy donors at FDA licensed centers. Each donor has been tested usiing FDA licensed tests and found nonreactive for HBsAg, Hepatitis B core antibody (anti-HBc), HIV antibody (anti-HIV-1/2), Hepatitis C antibody (anti-HCV), HTLV-1/2 antibody (anti-HTLV-1/2), Trypanosoma cruzi antibody (anti-T. cruzi), HIV-1, HCV, HBV, WNV nucleic acid testing and Syphilis microhemagglutination test.
- This proudct is manufactured, tested and released in compliance with the relevant GMP guidelines. This product is for *in vitro* use only.

Storage and shipping information

UltraGRO™-Advanced GI is most stable when stored forzen until needed. The recommended storage temperature is -20°C. Thaw frozen UltraGRO™-Advanced GI product in 37°C water bath before use. Once UltraGRO™-Advanced GI is thawed, it is recommended to fully use for completed medium preparation (e.g. 5%) the same day, or to divide it into single-use aliquots and store unused aliquots at -20°C.

MSC culture conditions

Media:

Complete medium is comprised of a basal media (e.g. α-MEM or other supportive media) and UltraGRO™-Advanced GI.

Culture type: Adhesion

Culture vessels: Cell culture plates, T-flasks, G-Rex flasks, Cell culture bags, Spinner flask or Vertical wheel bioreactor

Temperature range: 36°C to 38°C

Incubator atmosphere: Humidified atmosphere of 4~6% CO_2. Ensure that proper gas exchange is achieved in culture vessels.

Instructioins for use

- UltraGRO™-Advanced GI shows optimal growth of MSC at 5% (v/v) in typical cell culture media, i.e. α-MEM, which contains 2mM L-Glutamine as final concentrate.
- We recommend seeding MSCs at approximately $3x10^3$~$6x10^3$ per cm^2.
- UltraGRO™-Advanced GI has been fibrinogen-depleted and does not require the addition of heparin in the cell culture media.

Cell Lines

bone marrow mesenchymal stem cells, adipose tissue derived mesenchymal stem cells, umbilical cord derived mesenchymal stem cells, other mesenchymal stem cells

575 Fourteenth Street, NW Atlanta, GA 30318 USA(Manufacture) Website: www.atcbiomed.com/bio Email: sales@atcbiomed.com