

### **MelanoMax Supplement**

Catalogue Number: GENT-19-HMGS, 25 ml.

Ready to use, store below -20 °C

- - Enhances growth rate of normal human epidermal melanocytes
- - Increases the number of possible passages

In vitro use - Not for animal or human.



### **Introduction**

The growth rate of normal human epidermal melanocytes in vitro is very low and difficult to boost under normal culture conditions. Such culture medium often need additives such as : epidermal growth factor, triiodothyronine, hydrocortisone, insulin, transferrin, 7S nerve growth factor, cholera toxin, bovine brain extract and much more.

### **Product Description**

MelanoMax Supplement (GENT-19-GMS) is a ready to use solution containing all necessary melanocyte culture supplements and reduce the time necessary to prepare complete medium. MelanoMax Supplement (GENT-19-GMS) is a sterile, concentrated (20 X) solution intended for use in a complete culture environment for the growth of human epidermal melanocytes. Each 25 ml bottle of MelanoMax Supplement is the correct amount of supplement for a 500 ml bottle of basal HAM F10 nutrient Mixture (or other like MCDB153, Dubelco's medium,... ) 500 ml (in a 500 ml bottle) to which has to be added Antibiotics, HEPES 6 mM, Foetal Bovine Serum (2-10%) decompemented at 56°C for 30 min.

### **Intended Use**

MelanoMax Supplement is intended for use in conjunction with the aforementioned media for the routine culture of normal human epidermal melanocytes. Additional applications may include primary isolation of melanocytes from skin. This cell culture system can thus be used to answer basic questions related to pigment cell biology and may serve as a control for studies of malignant melanocytes.

The product should be handled under sterile conditions and is not for animal or human use.

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.

### **Storage and Stability**

- MelanoMax Supplement is stored under -20° C at our facility and is shipped on dry ice.

- If the product is to be used immediately, thaw in a 37° C water bath or overnight at 4° C.
- If thawed in a water bath, do not leave the product at 37° C for no more than 1 hour.
- When stored at 4° C, MelanoMax Supplement is stable for more than 15 days.
- If the product is not to be used within 15 days after receipt, we recommend storing it at below -20° C in a freezer that is not self-defrosting.
- Do not thaw and refreeze more than once. When stored at below -20°C, the product is stable until the expiration date shown on the label.

### **Preparation of Supplemented Culture Medium**

For routine culture of human epidermal melanocytes, add one bottle (25 ml) MelanoMax Supplement per 500 ml of an appropriate basal medium.

" Medium culture 500 ml (in a 500ml bottle)

" Antibiotics

" HEPES 6mM

" Foetal Bovine Serum (2-10%) decomplexed at 56°C for 30 min.

" The content of 1 vial of MelanoMax Supplement GENT-19-HMGS

Keep the bottle at 4°C until used.

In case of slow growth rate

It is possible to add 30 - 60 nM TPA (phorbol 12-myristate 13-acetate) and 2nM cholera toxin to the culture medium.

To further accelerate cell growth, one may add to the same culture medium 40 µg/ml bovine pituitary extract and 0.5 - 5 ng/ml EGF.

### **Handling:**

Good laboratory technique should be employed in the safe handling of this product.

This requires observing the following practices:

- Wear appropriate laboratory attire including a lab coat, gloves and safety glasses.
- Do not mouth pipette, inhale, ingest or allow to come into contact with open wounds. Wash thoroughly any area of the body which comes into contact with the product.
- Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device.
- Handle the product under sterile area.
- This product is intended for research purposes by qualified personnel only. It is not intended for use in humans or in animals. Gentaur is not liable for any damages resulting from the misuse or handling of this product.

Components

One bottle of 15 ml.

### **Selected literature**

The MelanoMax Supplement formulation is based on published papers namely :

" The stimulation of normal human melanocyte proliferation in vitro by melanocyte growth factor from bovine brain. Wilkins L, Gilchrest BA, Szabo G, Weinstein R, Maciag T. J Cell Physiol 1985 Mar;122(3):350-61.

" Selective proliferation of normal human melanocytes in vitro in the presence of phorbol

ester and cholera toxin. Eisinger M, Marko O. Proc Natl Acad Sci U S A 1982 Mar;79(6):2018-22.

" Serum-free culture of normal human melanocytes: growth kinetics and growth factor requirements. Pittelkow MR, Shipley GD. J Cell Physiol. 1989 Sep;140(3):565-76.

" alpha-Melanocyte stimulating hormone inhibits tumour necrosis factor-alpha stimulated intercellular adhesion molecule-1 expression in normal cutaneous human melanocytes and in melanoma cell lines. Hedley SJ, Gawkrödger DJ, Weetman AP, Morandini R, Boeynaems JM, Ghanem G, Neil SM. Br J Dermatol. 1998 Mar;138(3):536-43.

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