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# **Product Specification**

Product name	Lolina® Human UC-MSC stem-Prom® supplement kit 1, Xeno Free	
Cat.No.	NaC20120108	
Storage and shipping  Store at -20 °C. Once added to medium, store at 4 °C, do after thawing. Dry ice transportation.		

# **Product Description**

Lolina® stem-Prom® supplement kit 1 is a sterile lyophilized products which contains growth factors and proteins for significant enhancement of UC-MSC proliferation and viability. The kit is usually used as a in vitro UC-MSC culture supplement.

It has the following benefit:

**Enhance cell attachment and expansion ability:** NaC20120108 can promote cell attachment and expansion on the culture matrix and enhance the interaction between cells and the matrix.

**Provide essential nutrients and a stable environment:** NaC20120108 can carry essential nutrients, provide the components required for cell metabolism, and maintain the stability of the culture environment.

**Improve cell survival and proliferation rate:** NaC20120108 can significantly improve the survival and proliferation rate of MSCs, especially under low serum or serum-free culture conditions.

**Maintain stemness and multipotency:** NaC20120108 helps maintain the stemness and multipotency of MSCs, prevent premature cell differentiation, and maintain cell proliferation ability.

**Improve cell viability:** NaC20120108 can improve the vitality of MSCs, enhance cell survival rate and antiapoptosis ability.

# **Components**

Compound No.	Compounds	Size	Format
NaC20120108-A	r-Human serum albumi (HSA)	62.5mg	Lyophilized
NaC20120108-B	r-Huamn bFGF protein	2mg	Lyophilized

### **Instructions for Use**

### 1. Stock solution Preparation.

One kit is for 50ml cell culture medium.

The compounds are offered as powder in tubes. Please centrifuge before opening the cap to ensure the accuracy of the dosage.

Please carry out dissolution and packaging operations on a clean bench.

Spray the medium bottle and supplement tube with 70% ethanol and wipe to remove excess liquid. In a sterile field, remove the caps without touching the interior threads with fingers.

Reconstitute the protein in sterile 1 × PBS pH 7.4. Aliquot into appropriate volumes of storage solution.

When stored at -20°C, the stock solution is stable for 6 month. When stored at 4 °C, the stock solution is stable for 1 week.

#### 2. Reference Protocol

#### **Step 1: Culture medium Preparation**

- a. Thaw stock solutions of Lolina® Human UC-MSC stem-Prom® supplement kit 1.
- b. Dilute the stock solutions into regular culture medium to get complete culture medium.

#### Step 2: Cell culture

- c. Rapidly thaw frozen UC-MSC vials in a 37°C water bath.
- d. Transfer cells to a sterile conical tube with pre-warmed medium.
- e. Centrifuge at 300g for 5 minutes to pellet cells.
- f. Resuspend the cell pellet in complete culture medium plate into culture dishes/flasks.
- g. Change the medium every 2-3 days.

### Note

Cell Density: Avoid over-confluence to maintain MSC multipotency.

**Medium Preparation:** Use freshly prepared culture medium to ensure that it does not contain contaminants and degradation products.

Contamination Control: Use aseptic techniques to prevent contamination.