



Product Specification

Product name	Lolina® Human UC-MSC StemKeep® anti-oxidation supplement kit, Xeno Free
Cat.No.	NaC20120406
Storage and shipping	2-8 °C.

Product Description

As an additive for UC-MSC in vitro culture, Lolina® Human UC-MSC StemKeep® anti-oxidation supplement kit can effectively enhance the antioxidant capacity of cells and maintain the stemness of UC-MSCs. It has been proven that Anti-Oxi® peptide not only participates in the active oxygen metabolism of stem cells, but also plays an important role in the self-renewal, proliferation, aging, maintenance of stemness and differentiation regulation of stem cells. Meanwhile, Anti-Oxi® vita, acts as a synergistic antioxidant, also enhances the antioxidant capacity of the cells.

Components

Product name	Compounds	Amount
Comp. A	Anti-Oxi ® peptide	153.5µg
Comp. B	Anti-Oxi ® vita	53.2mg

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. Remove the caps without touching the interior threads with fingers.

Anti-Oxi® peptide stock solution: Prepare a 50 × Anti-Oxi® peptide stock solution by dissolving 1 tube of the powder in 1mL sterile water / MEM, sterile filtering it through a 0.22 µm filter, and store it in aliquots at -20°C.

Anti-Oxi® vita stock solution: Prepare a 50 × Anti-Oxi® vita stock solution by dissolving 1 tube of the powder in 1 mL sterile water / MEM, sterile filtering it through a 0.22 µm filter, and store it in aliquots at -20°C.

2. Reference Protocol

Step 1: Prepare Treatment Medium

- a. Thaw stock solutions of Lolina® Human UC-MSK StemKeep® anti-oxidation supplement kit.
- b. Dilute the stock solutions into culture medium to prepare the desired final concentration. Common final concentrations range is: Comp. A, from 0.307mg/L to 3.07mg/L; Comp. B, from 0.106g/L to 1.06g/L.

Step 2: Cell culture

- c. Seeding cells.
- d. The cells were allowed to adhere and grow for at least 4 hours.
- e. In the following cultivation period, the original culture medium was replaced with the original culture medium containing the indicated concentrations of Lolina® Human UC-MSK StemKeep® anti-oxidation supplement.

Note

1. **Concentration optimization:** Determine the optimal concentrations of Lolina® Human UC-MSK StemKeep® anti-oxidation supplement based on preliminary experiments to obtain the best effect without causing cytotoxicity.
2. **Control group:** Set up appropriate control groups, such as untreated cells and cells treated with culture medium only.
3. **Aseptic operation:** Ensure that all solutions and materials are sterile to prevent contamination.