

EXO Lyophilized Essence Serum

Product Number: EXO03

Shipping and Storage

1. Unresolved freeze-dried powder: stored in the dark at 2-8 °C, with a shelf life of 1 year.
2. Liquid after reconstitution: stored at 2-8 °C, recommended for use within 24 hours; Avoid repeated freezing and thawing.

Description

Exosomes are double layered membrane vesicles with a diameter of 30-150 nm, carrying bioactive substances such as proteins, mRNA, miRNA, and lipids. The extracellular vesicles of human umbilical cord mesenchymal stem cells function through the following mechanisms:

1. Promote cell proliferation and migration: activate the fibroblast proliferation signaling pathway, accelerate wound re-epithelialization;
2. Stimulating collagen synthesis and angiogenesis: Upregulating collagen deposition and promoting CD31+endothelial cell formation;
3. Immune regulatory function: Inhibit pro-inflammatory Th1/Th17 cell activity and alleviate tissue inflammatory response.

Main ingredients: Highly active human umbilical cord mesenchymal stem cells (hUMSC) derived extracellular vesicles

Appearance: Milky white or white loose freeze-dried powder, slightly milky liquid after reconstitution.

Specification: Research Kit: 3ml (including exosome particles ≥ 10 billion)

Application

This preparation is suitable for research or clinical application in the following fields:

1. **Research on tissue repair therapy**
 - 1.1. Difficult to heal wound repair;
 - 1.2. Oral mucosal ulcers caused by radiotherapy and chemotherapy;
2. **Research on Medical Aesthetics Applications**
 - 2.1. Skin regeneration and repair, anti-aging, improving skin quality and complexion;
 - 2.2. Scar formation and promotion of hair follicle repair.

Protocol

1. **Resolution:**
 - 1.1. Add 1ml sterile deionized water (ddH₂O) or injection water to the freeze-dried powder bottle;
 - 1.2. Let it stand for 5 minutes, gently shake until completely dissolved (minimum reconstitution volume of 200 μ L).
2. **Administration route (for research purposes):**
 - 2.1. Localized application: used for skin wounds or cosmetic research;
 - 2.2. Mucosa spray: treatment of oral ulcer;
 - 2.3. Subcutaneous/wound margin injection: research on difficult to heal wounds, etc;

Note

1. Taboo: Prohibited for individuals allergic to bioactive proteins;
2. Safety: Free from preservatives, hormones, and antibiotics;
3. Operating requirements: Dissolving and packaging must be carried out in a sterile environment;
4. Stability: If flocculation or precipitation is found after reconstitution, the use should be stopped;