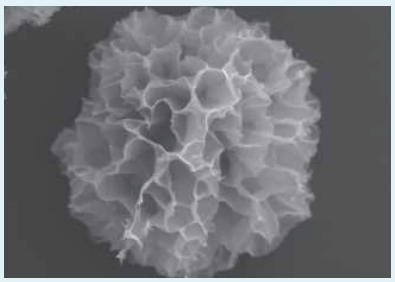
中科睿极
REGEN-αGEEK

DASEA Regencarrier®
Biomimetic Microcarrier

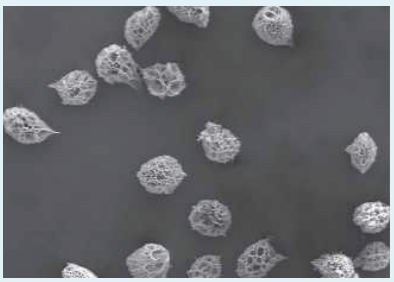
China: F20220000380
US FDA CDER DMF No.: 038392
US FDA CBER DMF No.: 29520
US FDA CBER DMF No.: 30042
US FDA CDER DMF No.: 039036

PRODUCTS INTRODUCTION

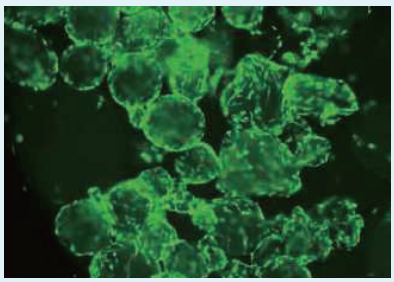
DASEA Regencarrier® Biomimetic Microcarrier is a biomimetic porous microcarrier optimized for the 3D culture of stem cells. It has been precisely controlled from the biochemical components of the material, the two-dimensional surface topology, to the three-dimensional spatial conformation and pore structure, to provide a biomimetic in vitro microenvironment, which can strongly promote the stem cell adhesion, proliferation, and maintenance of stem cell phenotype. Its unique porous structure can also effectively reduce the damage to cells caused by shear force in the process of three-dimensional cell culture. The dosage form and dose of DASEA Regencarrier® Biomimetic Microcarrier can be customized according to the user's needs. The porosity is >90%, and the particle size can be controlled between 150-300 μm, which can realize large-scale three-dimensional culture and expansion of stem cells. It has also obtained the CDE qualification for pharmaceutical excipient, and is the first injectable microcarrier for cells.



DASEA Regencarrier® Biomimetic Microcarrier is a biomimetic microcarrier specially designed for large-scale culture of adherent cells



The porous microsphere structure of DASEA Regencarrier® Biomimetic Microcarrier is a biomimetic microcarrier specially designed for large-scale culture of adherent cells under the scanning electron microscope



Human umbilical cord mesenchymal stem cells (hUCMSCs) were cultured on DASEA Regencarrier® Biomimetic Microcarrier is a biomimetic microcarrier specially designed for large-scale culture of adherent cells for 72 hours and live cells were stained (green fluorescence)

FEATURES

Biomimetic biochemical components, designed for cell affinity	Material mimics natural ECM components
2D topological structure biomimicry, designed for cell adhesion	Surface topological properties facilitate cell adhesion
3D conformational biomimicry, designed for cell proliferation	Micro-interconnecting pores facilitate cell migration
Biological enzymatic hydrolysis, designed for gentle collection of cells	The lysis of microcarrier does not damage cells

APPLICATION AREA

- Large-scale Expansion and Production of Stem Cells
- Large-scale Preparationand Production of Exosomes
- Organoid Culture
- Bioartifical Liver
- Vaccine Production
- Cultured Meat

PRODUCT PARAMETERS

PROPERTIES	PARAMETERS
Raw Material	Collagen-based biomacromolecules
Appearance	White to light yellow powder
Microscopic Morphology	3D biomimetic porous microspheres
Dispersion	No obvious agglomeration
D_{50} Particle Size	150-300 μm
Porosity	>90%
Average Pore Size	20 ± 10% μm
Surface Area	>10000 cm^2/g
Applicable	Adherent cells
Sterile	Aseptic packaging
Instructions	No pretreatment required, gentle degradation

REGEN-αGEEK
Tel: +860755-26412015
Web: http://www.regengeek.com Email: enquiry@regengeek.com
Address: No. 301, Building 6, Juanhu Science and Innovation Park, No. 500, Shuiyue Pavilion East Road, Xiashi Street, Haining City, Jiaxing City, Zhejiang Province, China.