

Podocytes Culture Medium

SKU: MD-0120

PRODUCT SHEET

Product Description

Podocytes are terminally differentiated highly specialized epithelial cells that lining the outer surface of the glomerular capillaries in kidney [1]. Podocytes together with the opposing monolayers of fenestrated endothelial cells in the vascular space and glomerular basement membrane (GBM) in between form the three-layer glomerular filtration barrier which functions as size-selective and charge-dependent molecular sieve for the main function of nephron. Podocytes injury, which is usually termed "foot process effacement" is a pathological process found in many kidney diseases [2]. *In vitro* cultured podocytes are useful model to study podocytes biology. These cells can also be used with glomerular endothelial cells for coculture studies in an attempt to better study barrier permeability or be cultured in Matrigel for three-dimensional or organoid studies [3].

iXCells® Podocytes Culture Medium is a complete medium uniquely designed to maintain primary podocyte growth *in vitro*. The cells maintain their cell specific markers as well as function for as long as 2-3 passages which makes it suitable for the following cell characterization and functional assays. The medium contains all the necessary nutrients that podocyte needs to grow and perform their function. The medium is provided as the antibiotics free complete culture medium supplemented with the working concentration of fetal bovine serum (FBS). No additional FBS is needed for cell culture.

For Research Use Only

iXCells Biotechnologies USA, Inc.
United States

www.ixcellsbiotech.com

Customer Support

E. supports@ixcellsbiotech.com

E. orders@ixcellsbiotech.com

P. +1 (858) 412 5988

SKU	MD-0120				
Country of manufacture	United States of America (USA)				
Quantity	One bottle				
Form	Liquid				
Component, Package and Storage	Component	Name	Size	Shipping	Storage
	MD-0120	Podocytes Culture Medium	500 mL	Dry ice	-20°C
	<i>Note: Please store the medium immediately at -20°C upon arrival.</i>				
Sterility Test	Negative for bacteria, yeast, fungi, and mycoplasma.				
Product line	<ul style="list-style-type: none"> • Mammalian cells • Primary cells • With serum (Fetal bovine serum) • With phenol red • Antibiotics free 				
Product use	<ul style="list-style-type: none"> • Do not use components that are beyond the expiration date indicated on the label. • Tested in the iXCells Human Podocytes (Cat: 10HU-250) following the recommended protocol in a 37 °C, 5% CO₂ incubator. • For laboratory research use only. Not for use in Diagnostic procedures. • Results may vary due to variations among species, organ or tissue origin, and donors. • Results may vary due to different culture conditions including temperature, CO₂ concentration, culture vessels, coating conditions, medium adding amount, and medium change frequency. For certain culture or test conditions, please follow the culture protocol for each specific cell type. • It is not approved for human or animal use. • iXCells in house cell culture test was performed under antibiotics free condition for ≥ 3 days by following the recommended protocol, and no bacterial or fungi contamination were observed during the culture period. • <i>Optional: Antibiotics-Antimycotic (Fisher, Cat# 15240062) or Penicillin Streptomycin (Thermo Fisher, Cat# 15140122) at working solution could be added if necessary, which have been tested in house without visible effect on cell morphology or function.</i> 				
Precaution	<ul style="list-style-type: none"> • When handling biohazardous materials such as cryopreserved cells, safe laboratory procedures should be followed, and personal protective equipment should be worn including but not limited to face masks, gloves, and lab coat. 				

References

- [1] Reiser J, Altintas MM. Podocytes. F1000Res. 2016 Jan 28;5:F1000 Faculty Rev-114. doi: 10.12688/f1000research.7255.1. PMID: 26918173; PMCID: PMC4755401.
- [2] Mundel P, Reiser J: Proteinuria: an enzymatic disease of the podocyte? Kidney Int. 2010;77(7):571-80. 10.1038/ki.2009.424
- [3] S.J. Shankland, J.W. Pippin, J. Reiser, P. Mundel, Podocytes in culture: past, present, and future, Kidney International, Volume 72, Issue 1, 2007, Pages 26-36, ISSN 0085-2538

Disclaimers

This product is for laboratory research purposes only and should not be used in humans. While iXCells Biotechnologies strives to provide accurate and current information on this product sheet, we do not guarantee its accuracy. Citations from scientific literature and patents are for informational purposes and may not be confirmed as accurate.

You are responsible for the safe storage, handling, and usage of this product, and iXCells Biotechnologies is not liable for any damages or injuries resulting from its receipt or use. While we make reasonable efforts to ensure the authenticity and reliability of deposited strains, we are not liable for damages arising from misidentification or misrepresentation of cultures.

Copyright

© iXCells Biotechnologies USA, Inc. 2023. All rights reserved.

Contact Information & Customer Support

iXCells Biotechnologies USA, Inc.

United States

www.ixcellsbiotech.com

Technical Support. supports@ixcellsbiotech.com

Product Sales. orders@ixcellsbiotech.com or contact your local distributor

US Phone. +1 (858) 412 5988