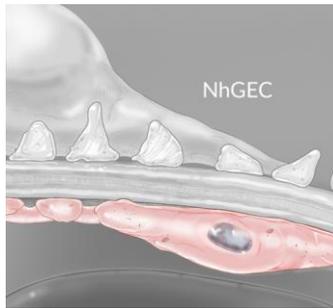




Human Kidney Glomerular Endothelial Cells



Cryopreserved Human Kidney Glomerular

Endothelial Cells are isolated from the cortex of human kidneys that are deemed not suitable for transplantation and have received consent to be donated for research. Glomerular endothelial cells are obtained after singular glomerular isolation and digestion. A pure population of glomerular endothelial cells is isolated by magnetic positive selection for CD31. Glomerular Endothelial cells are specialized microvascular cells that make up the innermost layer of the glomerular filtration barrier. They are separated from podocytes by a thin layer of glomerular basement membrane. These cells exhibit cobblestone morphology at confluence and present fenestrations specific of this cell type. Glomerular Endothelial Cells express factor VIII-related antigen, angiotensin converting enzyme activity, and endocytosed acetylated low-density lipoproteins. They are also characterized by the presence of intracellular Weibel-Palade bodies and caveolae and microvillous projections on the luminal surface.

QC Testing

Glomerular Endothelial Cells are characterized by yield, viability, and morphology. Purity is analyzed using immunofluorescence microscopy for endothelial specific markers CD31, vWF, EDH3, and VE cadherin expression. Each lot has a minimum of 500,000 cells per vial and a viability of $\geq 90\%$. Cells are terminally

differentiated and can be expanded for at least 5 passages.

Advantages

- **Reproducibility:** same donor can be used for long-term testing
- **Convenience:** no waiting for fresh glomerular endothelial cells to become available and the cryopreserved vials are not time-sensitive
- **High post-thaw yield**
- **Characterization:** cells have been extensively characterized by morphology, and surface/ internal marker expression
- **More comprehensive donor information**

Applications

Novabiosis Human Glomerular Endothelial Cells are ideal in studies of:

- function and pathophysiology of the kidney
- toxicity
- drug transporter research
- tissue engineering
- single-cell analysis of individual donors
- kidney disease progression

Donor information including: cause of death, age, gender, race, BMI, diabetic status, smoking history, alcohol use, substance use, HLA typing, serology and culture results, and co-morbidities, if any, is also included on the CoA.

Serology results include (positive or negative):

CMV, EBV, Toxo, HBV, HCV, HIV-1, HIV-2. Additional serology results may be provided upon request.

Culture results include (positive or negative):

Gram +, Gram -, Mycoplasma, Fungi.



Catalog Information

Cryopreserved Human Kidney Glomerular Endothelial
Cells
- Cat. # 3041

Product Storage and Warranty

CULTURES HAVE A LIMITED LIFESPAN *IN VITRO*.

Upon receipt, immediately store cryovial(s) in vapor phase
liquid nitrogen.

Cryopreserved human glomerular endothelial are viable for at
least 2 years when stored under these conditions.

Novabiosis guarantees the performance of its cells only if
following Novabiosis-specific instructions exclusively and the
recommended products and protocols are used and followed.

The performance of the cells is not guaranteed if any
modifications are made.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY.