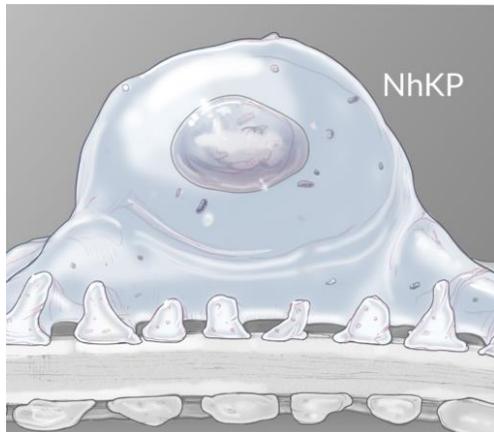




Human Kidney Podocytes



Cryopreserved Primary Human Kidney Podocytes

are isolated from the cortex of human kidneys that are deemed not suitable for transplantation and have received consent to be donated for research. Podocytes are obtained after singular glomerular isolation and digestion. A pure population of podocytes is isolated by magnetic positive selection. Podocytes are terminally differentiated cells found lining the outer surface of the glomerular capillaries. They have foot projections that form the slit diaphragm to allow ultrafiltration of the blood based on size and charge, and allows the filtration of cationic molecules, electrolytes, and small and mid-sized solutes while restricting the passage of anionic molecules and macromolecules.

QC Testing

Podocytes are characterized by yield, viability, and morphology. Purity is analyzed using immunofluorescence microscopy for podocyte specific markers nephrin, podocin, synaptopodin, and WT1. Podocytes are also tested for collagen IV expression by Western Blot. Podocytes are terminally differentiated, and cannot be cultured for more than 1 or 2 passage without loss of their particular traits (like foot processes and expression of slit diaphragm proteins).

Advantages

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

Applications

Novabiosis Podocytes 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 Podocytes
- Cat. # 3011

Product Storage and Warranty

CULTURES HAVE A LIMITED LIFESPAN *IN VITRO*.

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

Cryopreserved human kidney podocytes 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.