Human stem cells of perinatal and endometrium origin

Vilnius University

Brief description of a technology

We developed the unique technology of isolation of human stem cells (hSC) from perinatal derivatives (i.e. amniotic fluid, AF-SC) and expansion for direct application or long term biobanking for future needs.

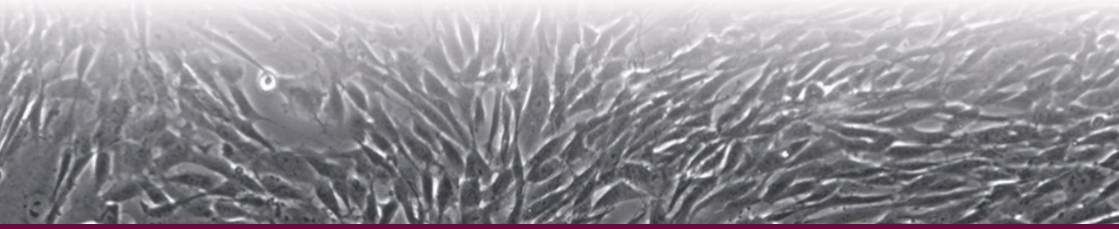
Advantages

hSCs from perinatal derivatives and endometrium:

- are not infected with pathogens;
- are less restricted due to HLA (human leukocyte antigen);
- release anti-inflammatory factors and may regulate inflammatory response;
- can be stimulated to differentiation into different types of tissue;
- are promising for allogenic transplantation.

Applications

- Biobanking;
- Personalized medicine to treat different diseases like stroke, neurological disorders, infertility, diabetes and others;
- Alleviation of symptoms of chronic illnesses;
- Tissue regeneration;
- Beauty and anti-ageing treatment.



Proposal

- We offer isolation, characterization, expansion and/or differentiation services of stem cells from perinatal derivatives and endometrium;
- We propose samples of hSCs derived from perinatal derivatives and endometrium;
- We offer our developed hSC isolation technology.

Research group

Our team includes highly experienced researchers with scientific background in stem cell biology, biochemistry, molecular cell biology and genetics. We have expertise in contract research (corp. *ThermoFisher Scientific* (former *Fermentas*), corp. *Nanodiagnostika*). In collaboration with Vilnius University Hospital Santaros Klinikos Center of Gynecology and Obstetrics we implemented projects: "Cytological, molecular and epigenetic studies of amniotic fluid" and "Regulation of amniotic fluid-derived stem cell functioning by microRNA and epigenetic factors".

Contacts

Prof. Dr. Rūta Navakauskienė

Department of Molecular Cell Biology, Institute of Biochemistry, Life Sciences Center, Vilnius University

Phone: +370 5 223 4409

E-mail: ruta.navakauskiene@bchi.vu.lt

Sauletekio av. 7, LT-10257 Vilnius, Lithuania

http://www.gmc.vu.lt/en/institutes/institute-of-biochemistry#department-of-molecular-cell-biology