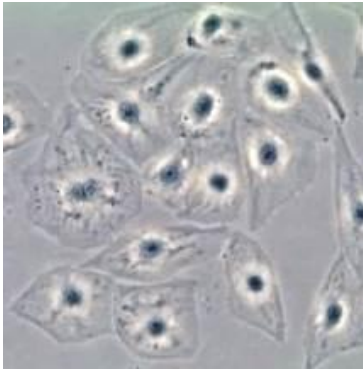


Why include LSECs in your research?

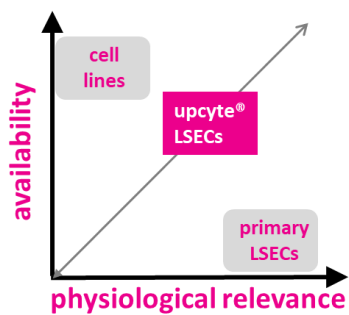


LSECs constitute the **sinusoidal wall** and can be regarded as unique capillaries, which differ from other capillaries in the body, as they possess open pores or fenestrae. These fenestrae filter fluids, solutes and particles that are exchanged between the sinusoidal lumen and the space of Disse. Among the various substances that are known to be endocytosed by LSECs are: proteins, glycoproteins, lipoproteins, and glycosaminoglycans. Foreign soluble macromolecules and colloids are eliminated from the circulation mainly by **receptor mediated pinocytosis**. There are only **three different receptors**, which have been functionally observed in LSECs:

- (1) the Mannose receptor (MR)
- (2) the hyaluronan /scavenger receptor (HA/S R)
- (3) the Fc-γ receptor (FcγR 2 BII, CD32b) [Smedsrod et al., 2004]

So far chronic conditions or toxicity affecting the LSECs have not been able to be investigated in vitro due to the lack of primary cells in sufficient quantity.

market position



advantages

- large lot sizes (up to 4000 vials)
- long term cultures
- easy to use
- primary-like phenotype
- characterized for typical endothelial cell markers as well as liver specific markers
- proliferating & transfectable
- generated from healthy cells
- 3 donors available

service options

You have a specific cell type, a special species, a favourite donor or patient derived disease material?

No problem, talk to us!

applications

**toxicity testing**

(e.g. short & long term cultures, repeated dose, different sensitivity to hepatic compounds)

**uptake studies**

(e.g. IgG particles taken up by CD32b receptor → ADCs – antibody drug conjugates)

**3D cultures**

(e.g. spheroids, hanging drop, printing, fluidic chip systems, matrices, scaffolds)

**co-cultures**

(with e.g. upcyte® hepatocytes and primary Kupffer Cells)

**immunology**

(e.g. antigen uptake - can prime naive CD4+ T-cells)

**transfection**

(e.g. GFP)

Find more info here: <https://www.upcyte.com/products/liver-sinusoidal-endothelial-cells/>