HUMAN HEPATIC STELLATE CELLS

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Ref: HuSCP1/HuSCP2
HuSCP3

HEPATIC STELLATE CELLS (HSC)

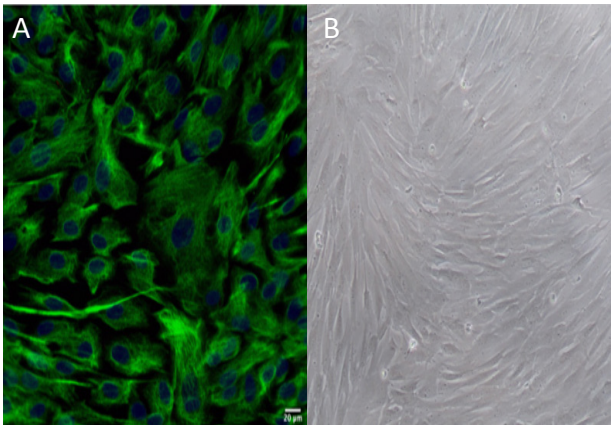
Hepatic stellate cells (HSC) are pericytes located in the space of Disse. These cells are the major cell type involved in liver fibrosis in response to liver injury. HSC play a key role in liver homeostasis, maintenance and regeneration including retinol metabolism storage, and release.

Likewise, in their quiescent state, HSC contain numerous vitamin A lipid droplets, constituting the largest reservoir of vitamin A in the body.
Besides, HSC has the capability to change into their activated stage transdifferentiating into myofibroblast-likecells which are linked with the pathogenesis of hepatic fibrosis.

Moreover, activated stellate cells can proliferate, contract, and regulate chemotaxis becoming the main source of extracellular matrix production during liver injury. This leads to the secretion of collagen which provides a scaffold for hepatocytes to repopulate during tissue regeneration and can lead to cirrhosis.

CHARACTERIZATION

- Immunofluorescence
  - Alpha-Smooth Muscle Actin
  - Vimentin
  - DAPI
- Appropriate morphology (limited serial passaging)
- Number of cells and Viability



A. Immunofluorescence of cultured HCS: Vimentin (green), alpha-smooth muscle actin (red), and DAPI (blue).
B. Plated stellate cells morphology 48 hours after seeding

HSC are produced under rigorous QC Standards and supplied with:

- *Demographic and clinical donor profile*
- *Viability and morphology assessment*
- *Culture protocols*

Shipping conditions: dry ice / LN2 vapor container

We recommend using cells for experiments at the earliest passage after initial plating.

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