

## Product Information

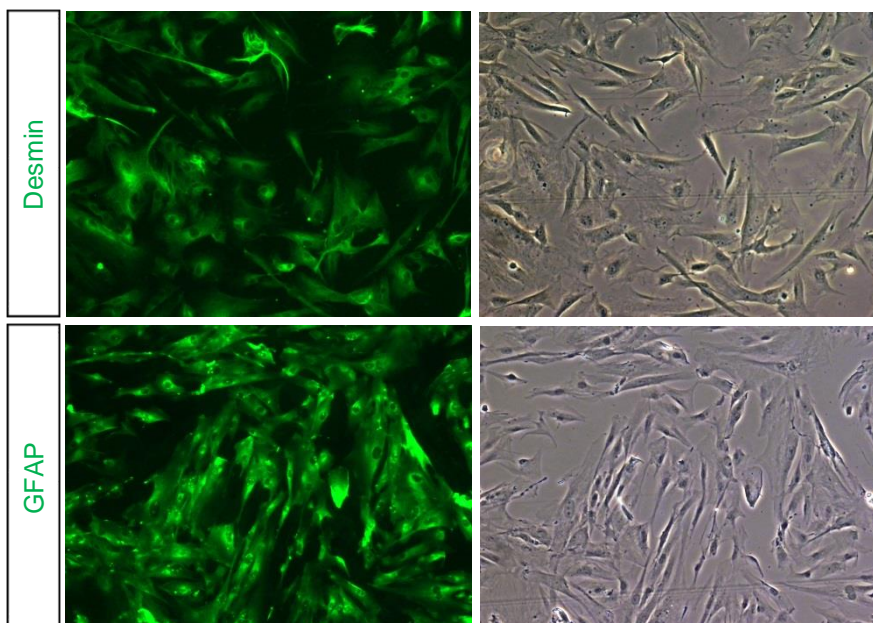
### Human Hepatic Stellate Cells (HHSC)

Catalog Number	10HU-210	Cell Number	1.0 million cells/vial
Species	<i>Human</i>	Storage Temperature	Liquid nitrogen

### Description

Hepatic stellate cells (HSCs) are liver-specific mesenchymal cells, and account for 5~8% of the cells in the liver. HSCs play vital roles in the homeostasis of liver extracellular matrix, repair, regeneration and fibrosis, and control retinol metabolism, storage and release. The stellate cell is the major cell type involved in liver fibrosis in response to liver injury. In healthy liver, HSCs are in a quiescent state, and contains numerous vitamin A lipid droplets, constituting the largest reservoir of vitamin A in the body. When the liver is damaged, HSCs can change into an activated state, which is characterized by proliferation, contractility and chemotaxis. The amount of vitamin A decreases progressively in injured liver. The activated HSCs also secrete collagen scar tissue, which can lead to cirrhosis. In chronic liver disease, prolonged and repeated activation of stellate cells causes liver fibrosis<sup>[1,2]</sup>. Primary culture of HSC is a valuable tool to study liver fibrosis.

Human Hepatic Stellate Cells (HHSC) from iXCells Biotechnologies are isolated from human liver. HHSC are cryopreserved after purification and delivered frozen. Each vial contains 1.0 million cells, which is enough to seed on four 10 CM dishes, and cells will be ready in 5~6 days to be passaged at 1:3 ratio. HHSC are characterized by immunofluorescence with antibodies specific to Desmin and GFAP. HHSC are negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast and fungi. HHSC are guaranteed to further expand for 2-3 passages in Stellate Cell Growth Medium (Cat # MD-0014).



**Figure 1.** Human hepatic stellate cells (HHSC) were stained with HSC markers, including Desmin and GFAP as indicated (green). Phase contrast images of each staining is shown on the right panel.

## Product Details

<b>Tissue</b>	Human liver
<b>Package Size</b>	1.0 million cells/vial
<b>Passage Number</b>	P3
<b>Shipped</b>	Cryopreserved
<b>Storage</b>	Liquid nitrogen
<b>Growth Properties</b>	Adherent
<b>Media</b>	Stellate Cell Growth Medium (Cat# MD-0014)

## References

- [1] Chunyue Yin, et al, J Clin Invest. 2013;123(5):1902–1910. Hepatic stellate cells in liver development, regeneration, and cancer.
- [2] Rockey D. C. . Semin Liver Dis 21(3):337-49. (2001) Hepatic blood flow regulation by stellate cells in normal and injured liver.

## Disclaimers

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