



Product Specification Sheet

Product Name: RePrime-5C (3000x)
Catalog Number: K5266-500
Package Size: 0.50 mL



Technical information:

Cocktail Formulation: DMSO solution contains: Forskolin 60 mM, SB431542 30 mM, IWP2 1.5 mM, DAPT 15 mM, LDN193189 0.3 mM

Purity: >98% (for each compound)

Storage: Store DMSO solution at -20°C.

Usage: Dilute 5C at 1:3000 into hepatocyte culture media to make 5C-modified media.

Biological Activity: Primary human hepatocyte maintenance in vitro using this 5 chemicals (5C)-modified cultural condition was reported to effectively inhibit epithelial-mesenchymal transition (EMT) and keep 4-week cultured primary human hepatocytes (PHH) resemble freshly isolated PHH in global gene expression profiles and hepatocyte-specific functions. With this chemical modulating approach, functional maintenance of PHH was shown to support hepatitis B virus infection over 4 weeks.

This finding overcome the long know hurdle in liver research for lacking in vitro model culture system for PHH and open doors for innovative PHH application in liver research and drug development.

The cocktail is specially made as a 3000x stock, so the final DMSO concentration in the cell media is less than 0.035%. The low DMSO concentration is essential for culturing primary cells.

Reference: 1. Xiang C, et al. Long-term functional maintenance of primary human hepatocytes in vitro. [Science 2019; 364:399-402](#)

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