

## 3D-Hepatocyte Maintenance Medium

PRIMACYT has developed 3D-HMM (3D-Hepatocyte Maintenance Medium). 3D-HMM is a serum-free growth factor containing culture medium that facilitates cultivation of functional human and animal hepatocytes in 3dimensional cell cultures. 3D-HMM may be used for long-term cultivation of hepatocytes to study hepatotoxicity of chemicals and drug-drug interactions, or in hepatocyte bioreactors.

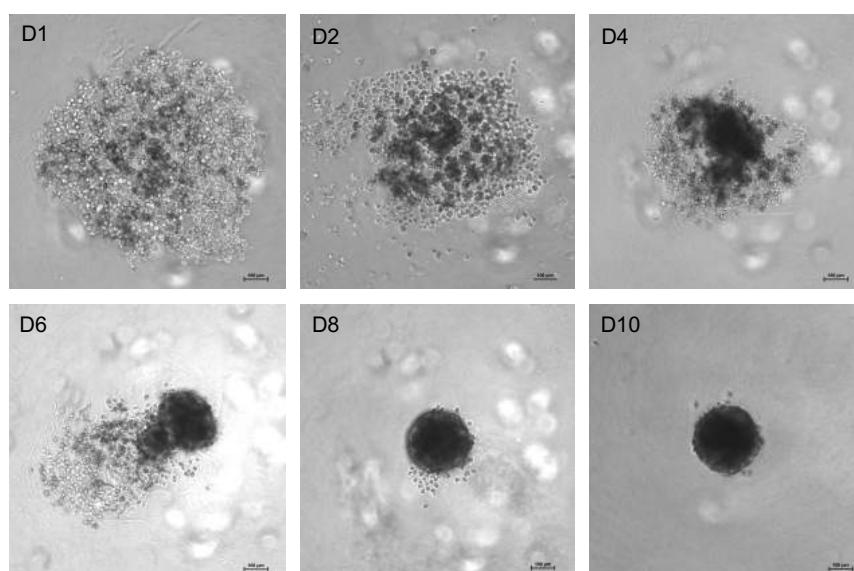


Figure 1: Spheroid development from fresh human hepatocytes, cultured for 1 to 10 days (D1-D10) in ultra-low attachment (ULA) plates with 3D-HMM.

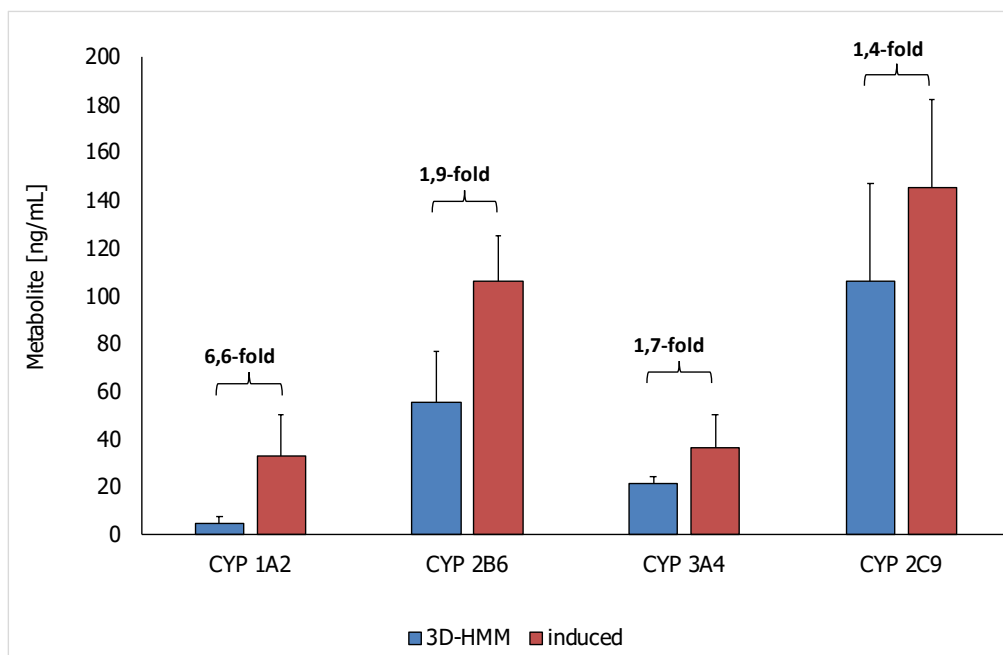


Figure 2: CYP-induction for CYP 1A2, 2B6, 3A4, and 2C9 in 3D-spheroides of cryopreserved human hepatocytes (cultured for 7 days in ULA-plates).

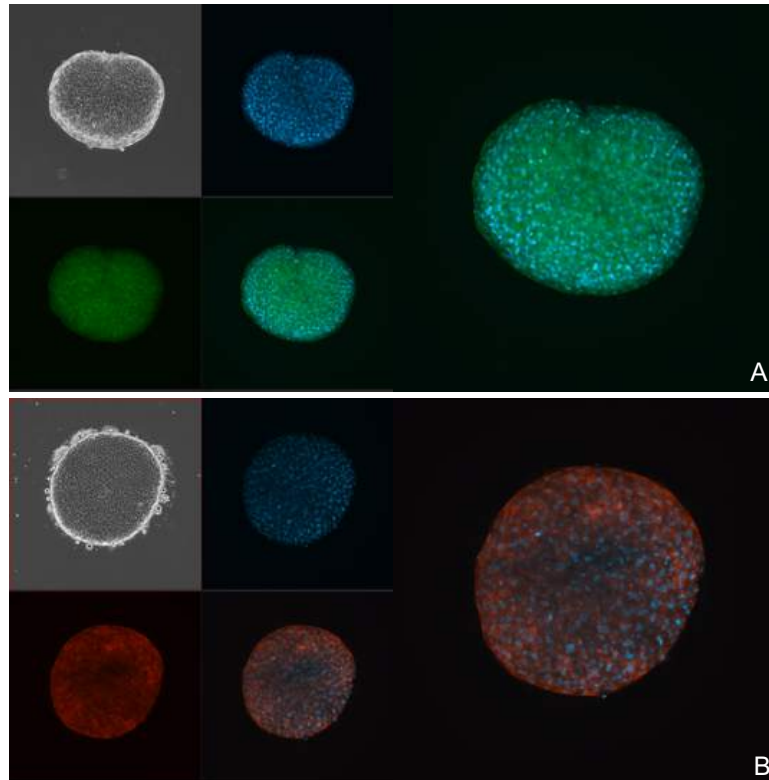


Figure 3: 3D-spheroids of cryopreserved human hepatocytes cultured for 7 days (in ULA-plates) and stained for  $\beta$ -actin (green, A), albumin (red, B) and nucleus (blue, A and B)

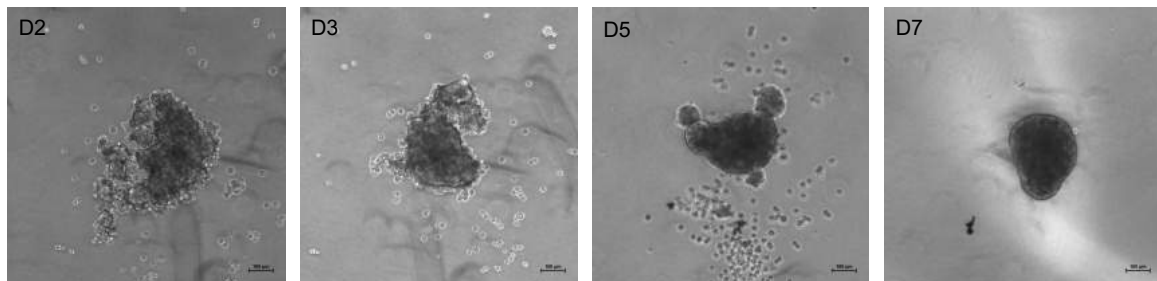


Figure 4: Spheroid development of cryopreserved cynomolgus hepatocytes, cultured in 3D-HMM in ULA-plates up to 7 days.

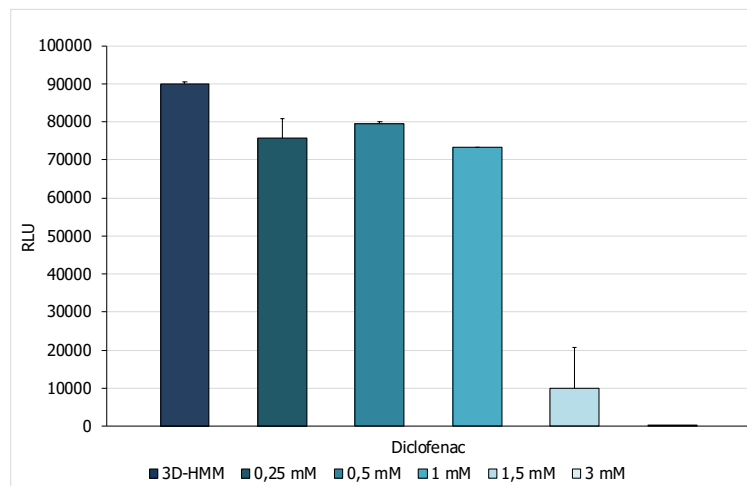


Figure 5: ATP-cytotoxicity assay for different diclofenac concentrations with 3D-spheroids of cryopreserved cynomolgus hepatocytes, cultured in 3D-HMM in ULA-plates.

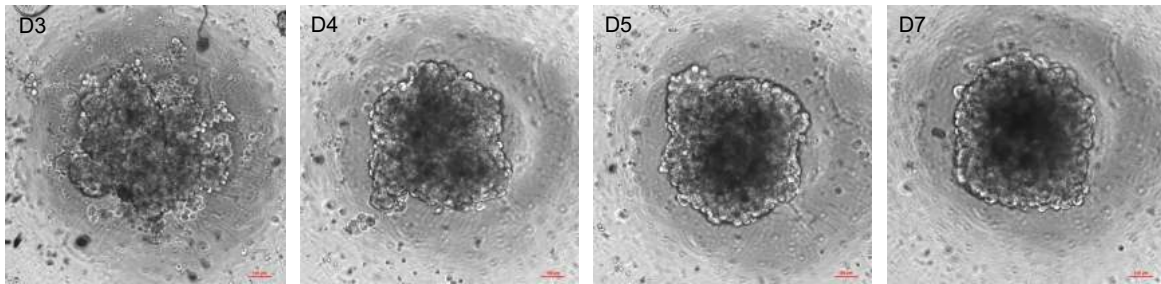


Figure 6: Cryopreserved beagle hepatocytes, cultured in 3D-HMM in ULA-plates up to 7 days.

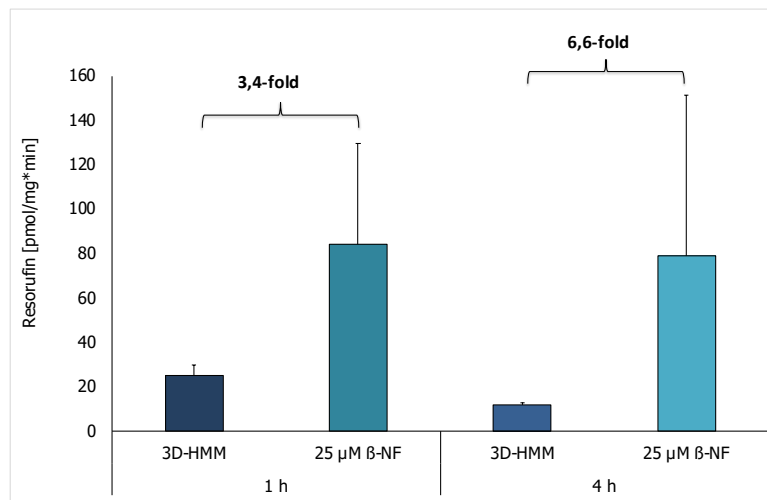


Figure 7: EROD-Assay with 3D-spheroids generated of cryopreserved beagle hepatocytes. The assay was conducted with different substrate incubation times (1 and 4 hours).

3D Hepatocyte Maintenance Medium has been evaluated and is recommended for the culture of human, Cynomolgus, and Beagle hepatocytes.

### **Product Specification**

3D-HMM-500S	3D-Hepatocyte Maintenance Medium, Basal Medium plus 7 Supplements (Supplements 2-8), 500 ml
3D-HMM-500	3D-Hepatocyte Maintenance Medium, Ready to Use Medium, 500 ml
3D-HMM-250	3D-Hepatocyte Maintenance Medium, Ready to Use Medium, 250 ml

### **Related Products**

TK-1	Thawing kit
HHCP-I	Human Hepatocytes Cryopreserved Plateable, Cytochrome P450 inducible
CHCP-I	Cynomolgus Hepatocytes Cryopreserved Plateable, Cytochrome P450 inducible
BHCP-I	Beagle Hepatocytes Cryopreserved Plateable, Cytochrome P450 inducible