

Overlay of Plateable Hepatocytes



Hepatocyte Reagents and Materials

IVAL Plateable Cryopreserved Hepatocytes
Culture Medium

Order Information Catalog Number

	IVAL	see PCS
• HIM™- Hepatocyte Induction Medium, with supplements, 50 mL/500 mL	IVAL	81018/81019
• RHIM™- Rodent Hepatocyte Induction Medium, with supplements, 50 mL/500 mL	IVAL	81037/81038
• Matrigel®	Corning	354234

Laboratory Tools for Overlay of Hepatocytes

Prior to overlay of hepatocytes, ensure the Biological Safety Cabinet (BSC) is equipped with the following:

- 37°C UCRM™
- Ice bucket containing ice
- 4°C stock of Matrigel®
- 4°C HIM™/RHIM™
- Serological, P1000 and P200 pipettes and appropriate sterile tips
- Multichannel pipettes and appropriate sterile tips may be used for small well-formats
- Reservoir for smaller well formats

Overlay Procedure

All media and labware should be brought to and maintained at 4°C prior to and during Matrigel® overlay to avoid congealing of Matrigel®. Hepatocyte culture plates are overlaid 4-6 hours after the initial plating of hepatocytes.

1. Calculate the amount of medium necessary to perform the media change and place this on ice or maintain at 4-10°C prior to application. Use the following table to determine the volume based on the well format.

Well Format	Volume per Well	Volume per Plate
6-well	2.0 mL	12.0 mL
12-well	1.0 mL	12.0 mL
24-well	500 µl	12.0 mL
48-well	250 µl	12.0 mL
96-well	100 µl	9.6 mL

2. To prepare an overlay solution for hepatocyte cultures, the Matrigel® stock must be brought to 4-10°C. Place the stock on ice 2-3 hours prior to diluting to the final concentration.
3. When the Matrigel® is in liquid form, dilute the Matrigel® stock to a 0.25 mg/mL working solution in the calculated volume of culture medium and mix thoroughly. (Calculate the amount of Matrigel® stock necessary by multiplying the total volume of medium by the final concentration of Matrigel® (0.25 mg/mL) and dividing by the actual concentration of Matrigel®.)
4. Replace the media in the multi-well plate(s) with the overlay media that contains the Matrigel®.
5. Incubate the hepatocytes in the presence of Matrigel® overnight to allow proper overlay formation.

Lot Specific Information

To inquire about our products and services or for technical questions please contact:

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