

## Instruction Manual

### ■ Hepatocyte Growth Medium

Product	Size	Catalog Number
Hepatocyte Growth Medium (Ready-to-use)	500 ml	C-25010
Hepatocyte Growth Medium Kit	500 ml	C-25110
Hepatocyte Basal Medium	500 ml	C-25210
Hepatocyte Basal Medium, phenol red-free	500 ml	C-25215
Hepatocyte Growth Medium SupplementMix	for 500 ml	C-39642
Hepatocyte Growth Medium SupplementPack	for 500 ml	C-39640

### ■ Hepatocyte Maintenance Medium

Product	Size	Catalog Number
Hepatocyte Maintenance Medium (Ready-to-use)	500 ml	C-25020
Hepatocyte Maintenance Medium Kit	500 ml	C-25120
Hepatocyte Maintenance Medium SupplementMix	for 500 ml	C-39652
Hepatocyte Maintenance Medium SupplementPack	for 500 ml	C-39650

#### Recommended for

- Human Hepatocytes (HHpC)

#### Product Description

PromoCell Hepatocyte Media are serum-free media and have been developed for the *in vitro* cultivation of human hepatocytes. The medium is optimized for primary human cells, but can also be used for porcine hepatocytes. PromoCell Hepatocyte Media are available as Medium (Ready-to-use) or as Medium Kit.

The Media (Ready-to-use) consist of a 500 ml bottle of Basal Medium and one vial of SupplementMix. The Medium Kit consists of a 500 ml bottle of Basal Medium and the SupplementPack (a set

of individual vials with pre-measured supplements) allowing the user full control over the media formulation.

Adding the SupplementMix or the SupplementPack to the Basal Medium results in the complete Growth Medium / Maintenance Medium.

Basal Medium (with or without phenol red) as well as SupplementMix and SupplementPacks can also be purchased separately.

**Note:** Under standard *in vitro* cell culture conditions, mature human hepatocytes usually do not survive for longer than 10 - 14 days and do not proliferate.

## Final supplement concentrations (after addition to the medium)

	Hepatocyte Growth Medium	Hepatocyte Maintenance Medium
■ Epidermal Growth Factor (recombinant human)	10 ng / ml	—
■ Insulin (recombinant human)	5 µg / ml	6 ng / ml
■ Hydrocortisone	0.5 µg / ml	—
■ Transferrin, holo (human)	10 µg / ml	—
■ Ascorbic Acid	250 µg / ml	—
■ Bovine Serum Albumin-Fatty Acid Free (BSA-FAF)	3.75 mg / ml	—
■ Dexamethasone	—	400 ng / ml

### Supplementation Details

PromoCell Hepatocyte Growth Medium contains all the growth factors and supplements necessary for long-term cultivation of human hepatocytes, e.g. Epidermal Growth Factor, Insulin, and Transferrin (for details see the table above). If the media compounds of the Hepatocyte Growth Medium interfere with certain experimental setups, we recommend using the Hepatocyte Maintenance Medium. PromoCell Hepatocyte Maintenance Medium has been developed for short-term cultivation of hepatocytes and contains fewer supplements (for details see the table above). PromoCell Hepatocyte Media do not contain antibiotics or antimycotics and are formulated for use in an incubator with an atmosphere of 5% CO<sub>2</sub>.

**Note:** For culturing Hepatocytes, Collagen type I coated culture vessels are necessary. Please make sure to have them before starting the protocol.

### Preparation of the supplemented Medium for Use

Thaw the SupplementMix or SupplementPack at 15 to 25°C. Aseptically mix

the supplement solutions by carefully pipetting up and down. Then, transfer the entire content of each supplement to the Basal Medium. Close the bottle and swirl gently until a homogenous mixture is formed.

### Storage and Stability

Store the Basal Medium at 4 to 8°C in the dark and the SupplementMix or SupplementPack at -20°C immediately after arrival. Do not freeze the Basal Medium. If stored properly, the products are stable until the expiry date stated on the label. After adding the supplements to the Basal Medium, the shelf life of the complete medium is 6 weeks at 4 to 8°C. Do not freeze the complete medium.

For use, pre-warm only an aliquot of the complete medium and keep the remaining medium refrigerated at 4 to 8°C.

**Note:** The SupplementMix and SupplementPack are delivered thawed and can be frozen after arrival without losing any activity.

### Quality Control

All lots of PromoCell Hepatocyte Media

are subjected to comprehensive quality control tests using primary human hepatocytes. Each lot is checked for adherence rate, typical morphology, and metabolism of the tested hepatocytes. Approved in-house lots of media are used as a reference.

In addition, all lots of media have been tested for the absence of microbial contaminants (fungi, bacteria, mycoplasma).

### Intended Use

The products are for *in vitro* use only and not for diagnostic or therapeutic procedures. For safety precautions please see appropriate MSDS.

**Note:** Due to their low serum content or the absence of serum, PromoCell media are not suitable for trypsin neutralization (e.g. when splitting the cells). Instead we recommend to use our DetachKit (C-41200, C-41210, C-41220), which contains HEPES BSS, Trypsin/EDTA and Trypsin Neutralizing Solution.

**If you require special media modifications, we offer a Custom Media Service starting at 10 bottles per order. Please ask for details.**

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