

## 人肝癌细胞Hep G2 [HEPG2]说明书

目录号：ECL-0103

细胞名称：Hep G2 [HEPG2]

细胞描述：人肝癌细胞 Hep G2 [HEPG2]来源于一个 15 岁的白人男性肝癌患者。该细胞表达 3-羟基-3-甲基戊二酰还原酶 (3-hydroxy-3-methylglutaryl-CoA) 和肝脏三酰甘油脂肪酶 (hepatic triglyceride lipase) 活性。此细胞不携带乙肝病毒基因组。

物种：白人，男性，15岁组织：

肝

细胞来源：资源库留存生物

安全等级：BSL-1

完全培养液配方：见下方备注

批次/冻存日期：详见 冻存管/培养瓶 标识参考

传代比例：1:3

参考传代周期：4-6 天参考

换液频率：3-4 天

冻存液配方：完全培养液 95%，DMSO 5%

细胞形态：贴壁生长 支原体

检测结果：阴性STR 鉴定结

果：

D5S818: 11,12

D13S317: 9,13

D7S820: 10,10

D16S539: 12,12

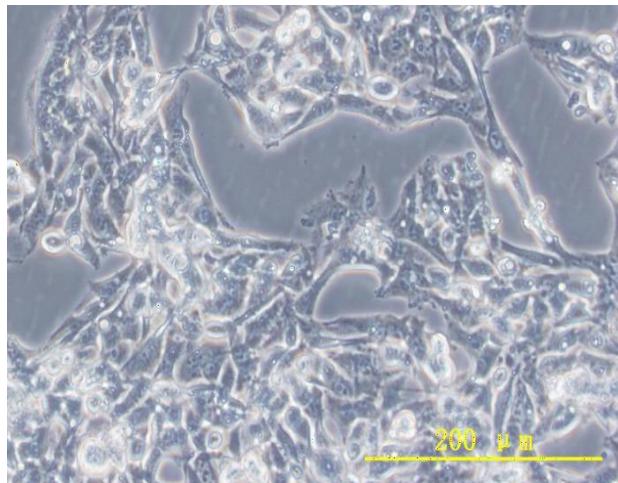
vWA: 17,17

TH01: 9,9

Amelogenin: X,Y TPOX: 8,9

CSF1PO: 10,11

## Hep G2 [HEPG2]细胞照片：



## 参考文献：

Knowles BB, Aden DP. Human hepatoma derived cell line, process for preparation thereof, and uses therefor. US Patent 4,393,133 dated Jul 12 1983

Schardt C, et al. Characterization of insulin-like growth factor II receptors in human small cell lung cancer cell lines. *Exp. Cell Res.* 204: 22-29, 1993. PubMed: [8380141](#)

Cuthbert C, et al. Regulation of human apolipoprotein A-I gene expression by gramoxone. *J. Biol. Chem.* 272: 14954-14960, 1997. PubMed: [9169468](#)

Deleersnyder V, et al. Formation of native hepatitis C virus glycoprotein complexes. *J. Virol.* 71: 697-704, 1997. PubMed: [8985401](#)

Benn J, et al. Hepatitis B virus HBx protein induces transcription factor AP-1 by activation of extracellular signal-regulated and c-Jun N-terminal mitogen-activated protein kinases. *J. Virol.* 70: 4978-4985, 1996. PubMed: [8764004](#)

Goodrum FD, et al. Adenovirus early region 4 34-kilodalton protein directs the nuclear localization of the early region 1B 55-kilodalton protein in primate cells. *J. Virol.* 70: 6323-6335, 1996. PubMed: [8709260](#)

Kolanus W, et al. alphaLbeta2 integrin/LFA-1 binding to ICAM-1 induced by cytohesin-1 a cytoplasmic regulatory molecule. *Cell* 86: 233-242, 1996. PubMed: [8706128](#)

Lewis W, et al. Fialuridine and its metabolites inhibit DNA polymerase gamma at sites of multiple adjacent analog incorporation, decrease mtDNA abundance, and cause mitochondrial structural defects in cultured hepatoblasts. *Proc. Natl. Acad. Sci. USA* 93: 3592-3597, 1996. PubMed: [8622980](#)

Jang SI, et al. Activator protein 1 activity is involved in the regulation of the cell type-specific expression from the proximal promoter of the human profilaggrin gene. *J. Biol. Chem.* 271: 24105-24114, 1996. PubMed: [8798649](#)

Roesler WJ, et al. The alpha-isoform of the CCAAT/enhancer-binding protein is required for mediating cAMP responsiveness of the phosphoenolpyruvate carboxykinase promoter in hepatoma cells. *J. Biol. Chem.* 271: 8068-8074, 1996. PubMed: [8626491](#)

Lee JH, et al. The proximal promoter of the human transglutaminase 3 gene. *J. Biol. Chem.* 271: 4561-4568, 1996. PubMed: [8626812](#)

Lieber A, et al. Recombinant adenoviruses with large deletions generated by cre-mediated excision exhibit different biological properties compared with first-generation vectors in vitro and in vivo. *J. Virol.* 70: 8944-8960, 1996. PubMed: [8971024](#)

Dubuisson J, Rice CM. Hepatitis C virus glycoprotein folding: disulfide bond formation and association with calnexin. *J. Virol.* 70: 778-786, 1996. PubMed: [8551615](#)

Yamaguchi Y, et al. Biochemical characterization and intracellular localization of the Menkes disease protein. *Proc. Natl. Acad. Sci. USA* 93: 14030-14035, 1996. PubMed: [8943055](#)

Kounas MZ, et al. Cellular internalization and degradation of antithrombin III-thrombin, heparin cofactor II-thrombin, and alpha<sub>1</sub>-antitrypsin-trypsin complexes is mediated by the low density lipoprotein receptor-related protein. *J. Biol. Chem.* 271: 6523-6529, 1996.

PubMed: [8626456](#)

Klemm DJ, et al. Adenovirus E1A proteins regulate phosphoenolpyruvate carboxykinase gene transcription through multiple mechanisms. *J. Biol. Chem.* 271: 8082-8088, 1996.

PubMed: [8626493](#)

Wu X, et al. Demonstration of a physical interaction between microsomal triglyceride transfer protein and apolipoprotein B during the assembly of ApoB-containing lipoproteins. *J. Biol. Chem.* 271: 10277-10281, 1996. PubMed: [8626595](#)

Knowles BB, et al. Human hepatocellular carcinoma cell lines secrete the major plasma proteins and hepatitis B surface antigen. *Science* 209: 497-499, 1980. PubMed: [6248960](#)

Ostlund RE Jr., et al. A sterospecific myo-inositol/D-chiro-inositol transporter in HepG2 liver cells. *J. Biol. Chem.* 271: 10073-10078, 1996. PubMed: [8626564](#)

Busch SJ, et al. Differential regulation of hepatic triglyceride lipase and 3-hydroxy-3-methylglutaryl-CoA reductase gene expression in a human hepatoma cell line, HepG2. *J. Biol. Chem.* 265: 22474-22479, 1990. PubMed: [2176219](#)

Darlington GJ, et al. Growth and hepatospecific gene expression of human hepatoma cells in a defined medium. *In Vitro Cell. Dev. Biol.* 23: 349-354, 1987. PubMed: [3034851](#)

Aden DP, et al. Controlled synthesis of HBsAg in a differentiated human liver carcinoma-derived cell line. *Nature* 282: 615-616, 1979. PubMed: [233137](#)

Knowles BB, Aden DP. Human hepatoma derived cell line, process for preparation thereof, and uses therefor. US Patent 4,393,133 dated Jul 12 1983

### 备注：

1 人肝癌细胞 Hep G2 [HEPG2]完全培养液 配方 (100 ml) :

MEM (Invitrogen, 11090081)	87 ml
FBS (Gibco)	10 ml
Glutamax (Invitrogen 35050061)	1 ml
Non-essential Amino Acids, 100× (Invitrogen, 11140050)	1 ml
Sodium Pyruvate 100 mM Solution (Invitrogen 11360070)	1 ml

2 Hep G2 [HEPG2]对培养条件要求较严格，特别是 pH 值和血清质量，否则可能影响细胞凝集数量，应使用高质量低内毒素，未灭火的胎牛血清，可以帮助圆形

的细胞从簇更好的贴壁及形成单层细胞。细胞内容易有空泡，特别是在融合时。

3 我库冻存时，每支冻存管约含  $7\times10^5$  细胞量，体积为  $500\text{ }\mu\text{l}$ ，预期存活率  $70\%$ ，建议复苏至 1 个 T25 培养瓶中。