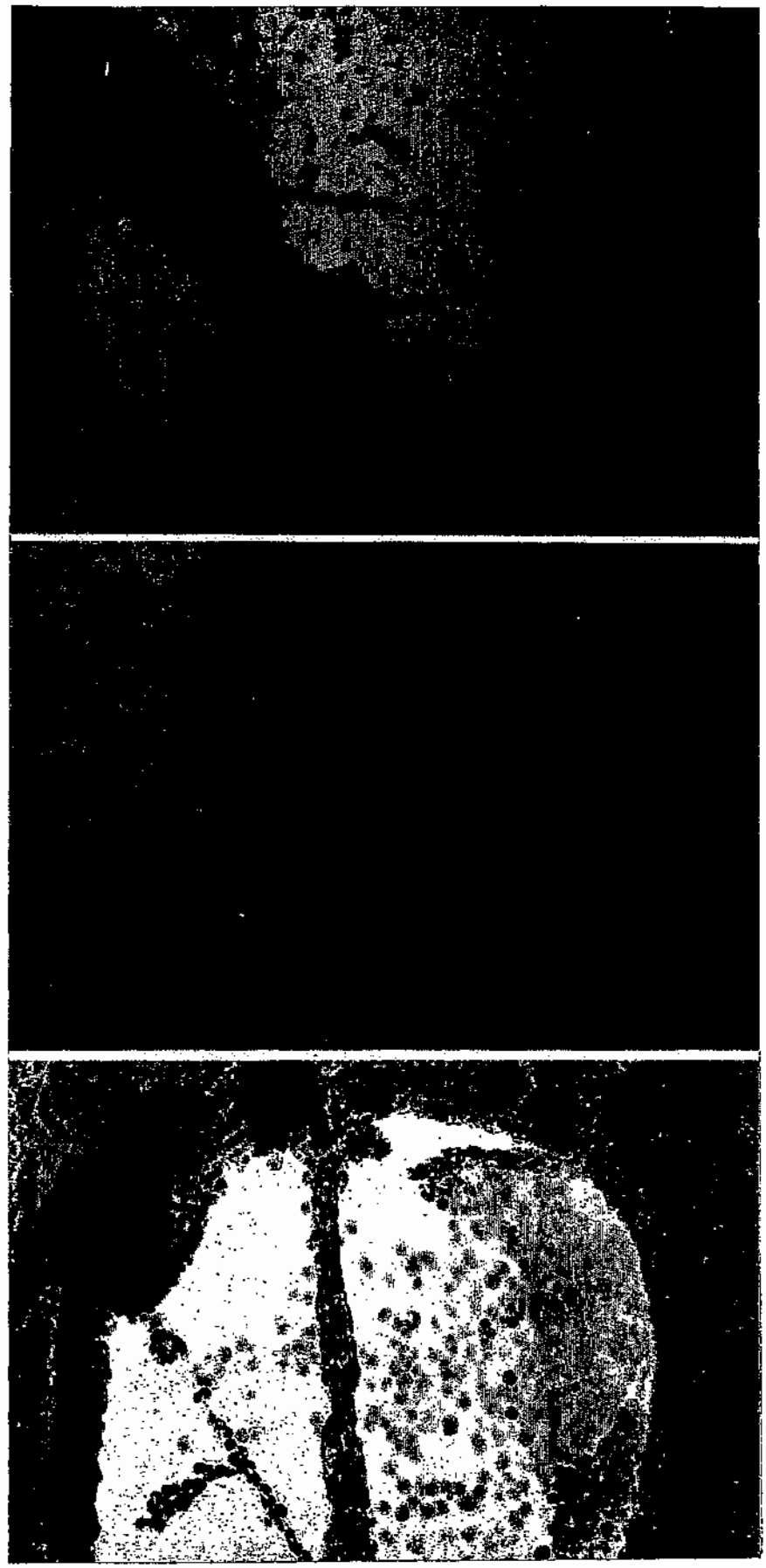
Fig.1 Differentiation into neurons and glia cells

Left (GFPA) Middle (S100) Right (Synaptophysine)

Fig.2 Differentiation into endothelial cells



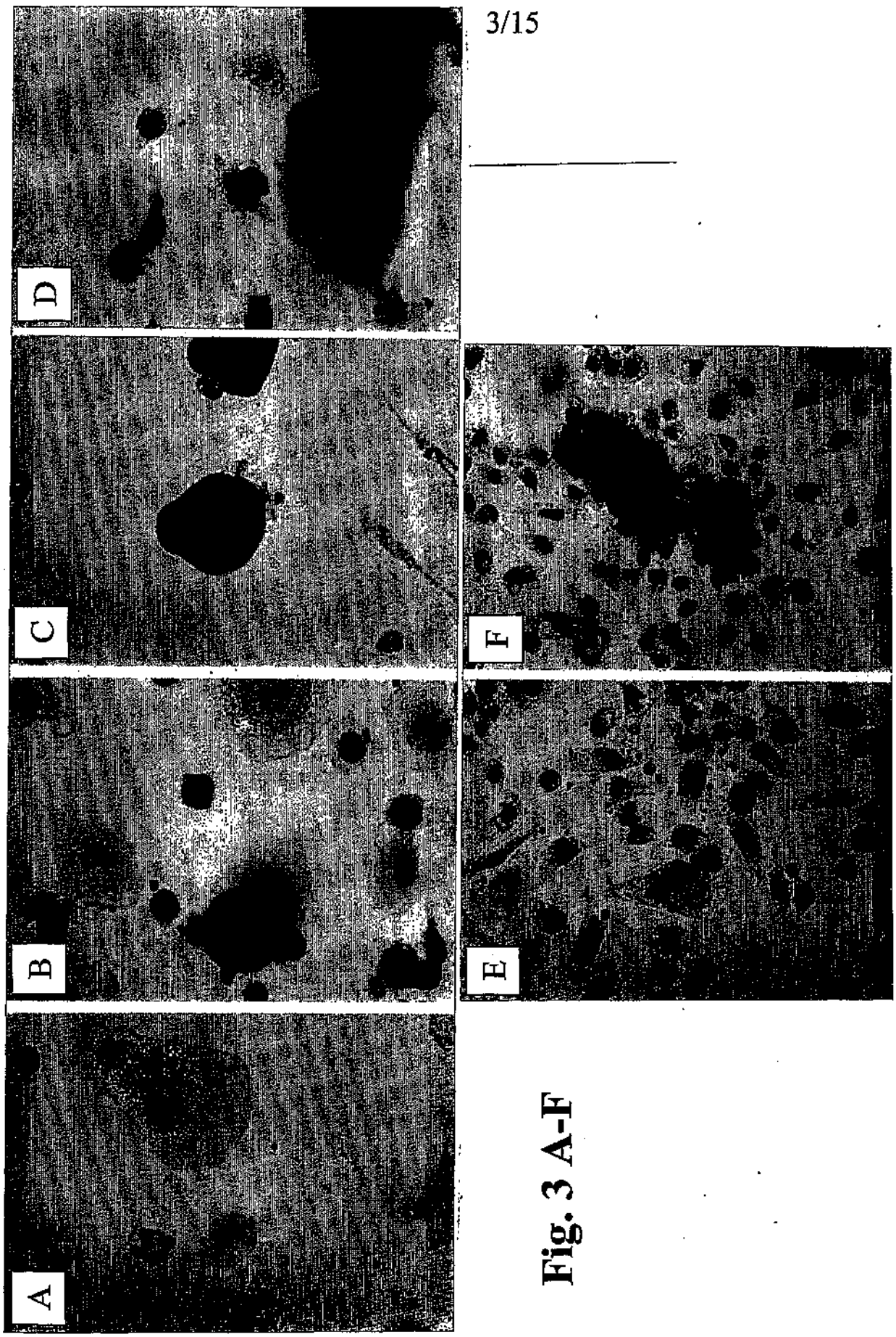
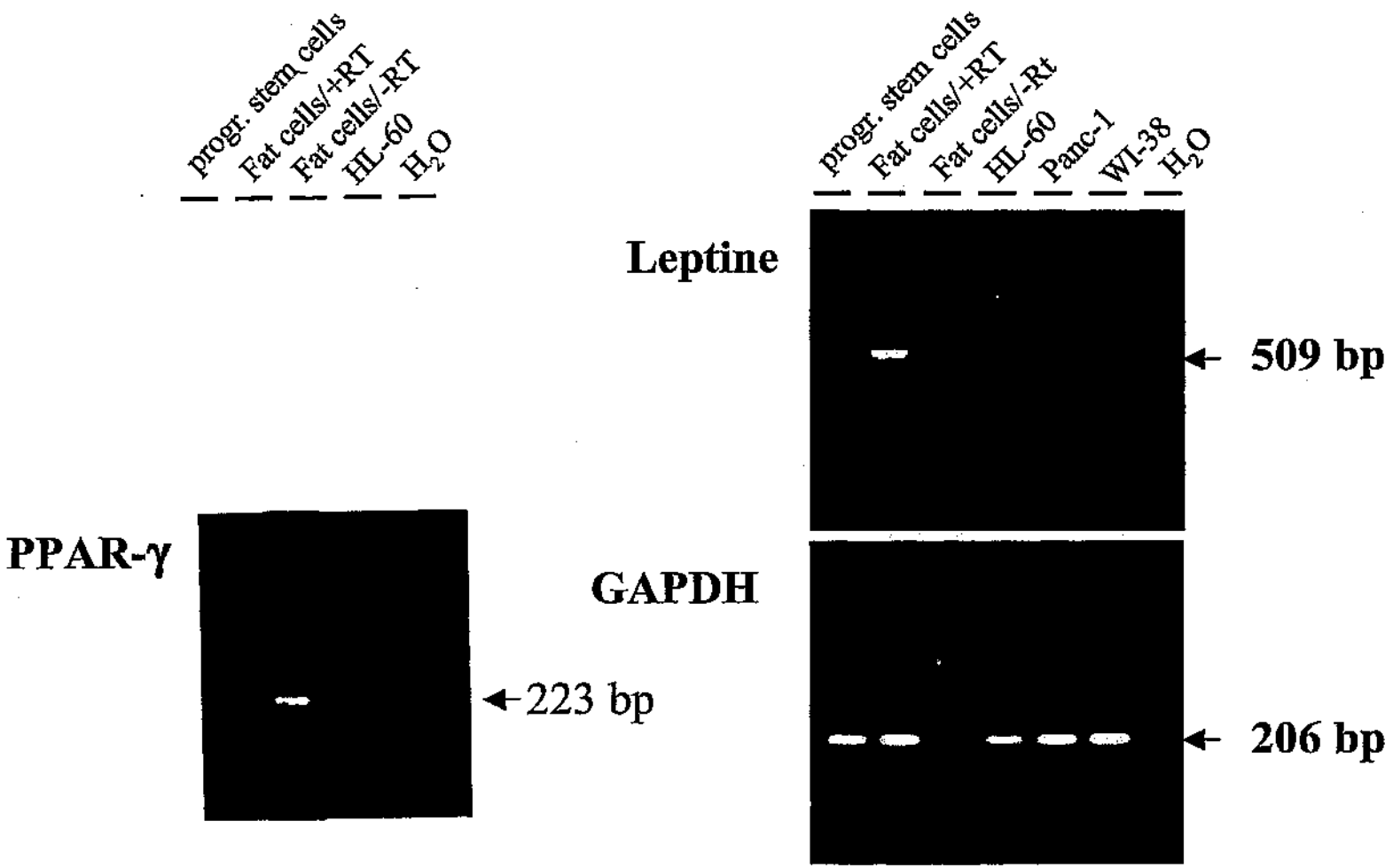


Fig. 3 A-F

Fig. 3G RT-PCR Analysis of adipocyte-specific genes in monocytic programmable stem cells und fat cells programmed therefrom



HL-60 = human promyeloic Leukaemia cell line
Panc-1 = human pankreatic adenocarcinoma cell line
WI-38 = human embryonic lung fibroblast cell line (not transformed)

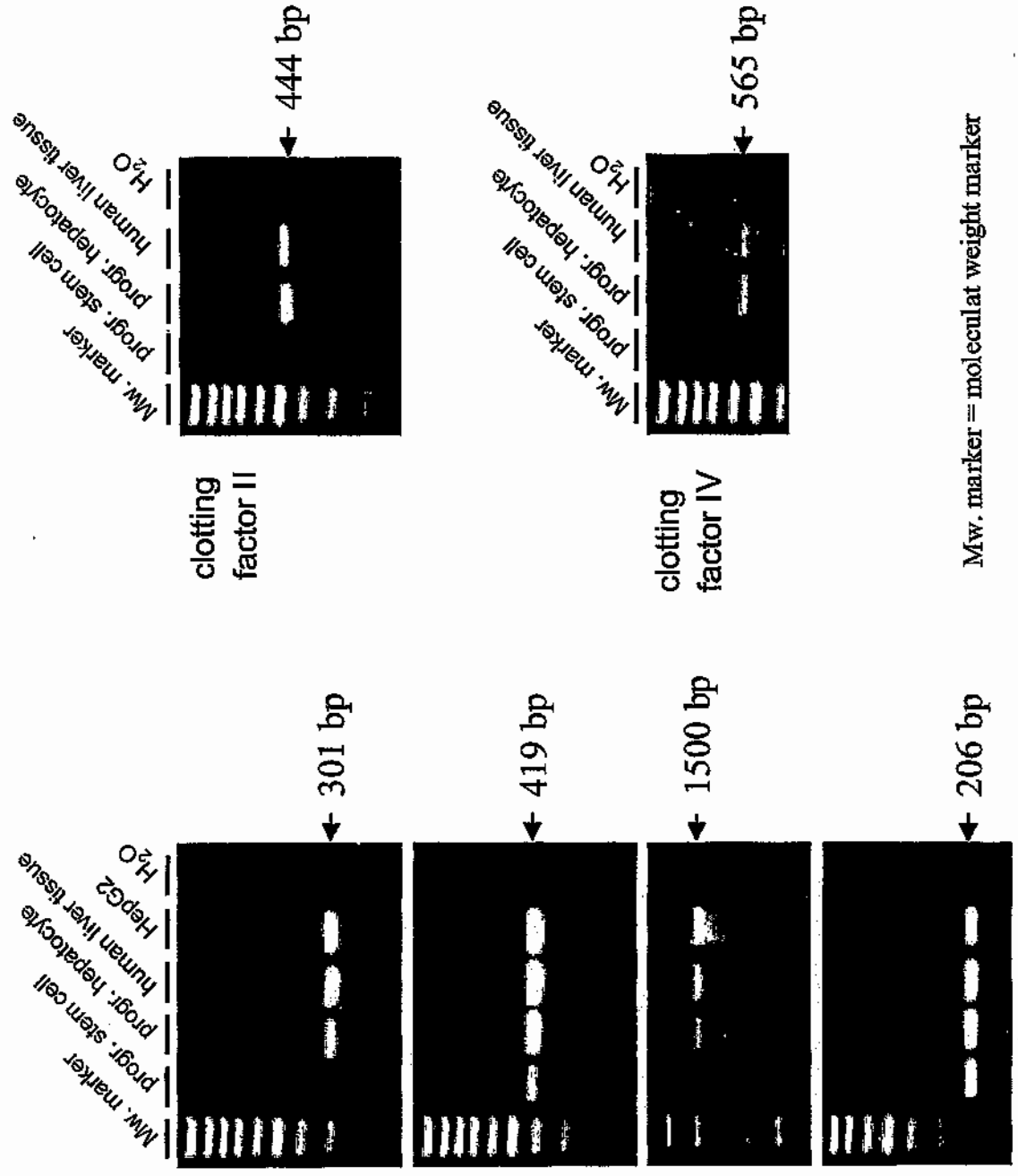
Alpha-fetoprotein-positive hepatocytes derived from programmable stem cells of monocytic origin

Fig. 4A: day 6 after cultivation of the stem cells with LCGM

Fig. 4B: day 10 after cultivation of the stem cells with LCGM

Fig. 4C: day 12 after cultivation of the stem cells with LCGM

Fig. 4D RT-PCR analysis of hepatocyte-specific genes in programmable stem cells and programmed hepatocytes



Cytokeratin 5 and 6 positive keratinocytes derived from programmable stem cells of monocytic origin

Fig. 5A: day 6 after treatment with KCGM (keratinocyte cell conditioned medium)

Fig. 5B: day 10 after treatment with KCGM (keratinocyte cell conditioned medium)

Fig. 6 Stem cell marker of dedifferentiated programmable stem cells of monocytic origin

The dedifferentiated programmable stem cells derived according to the specification show clearly positive CD117 expression and strongly positive expression of the stem cell markers CD90, CD123 and CD135



Fig. 7A: FISH Y chromosome detection in stem cells derived hepatocytes



Fig. 7B: FISH Y chromosome detection in stem cells derived hepatocytes (↑), endothelial cells (↑) and bile duct epithelial cells (↑)

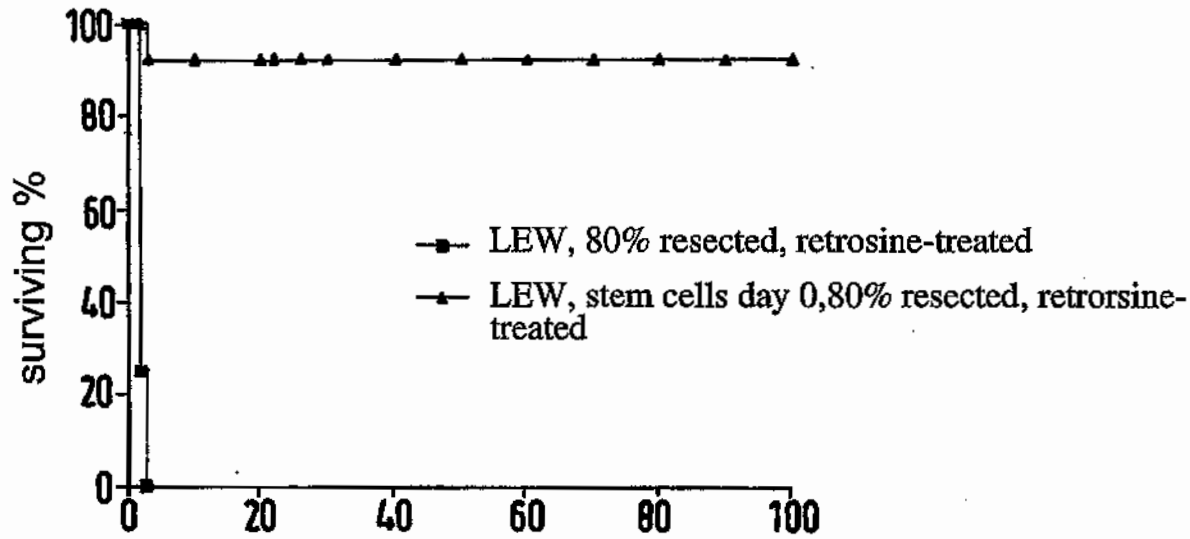


Fig. 7C

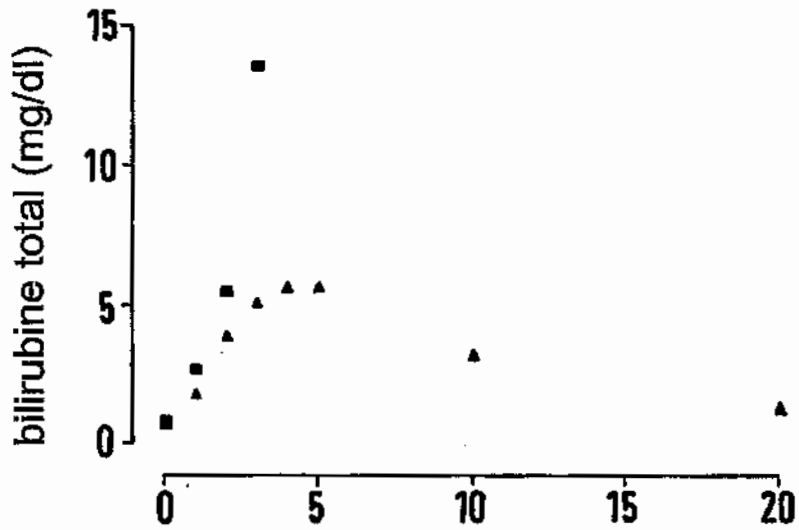


Fig. 7D

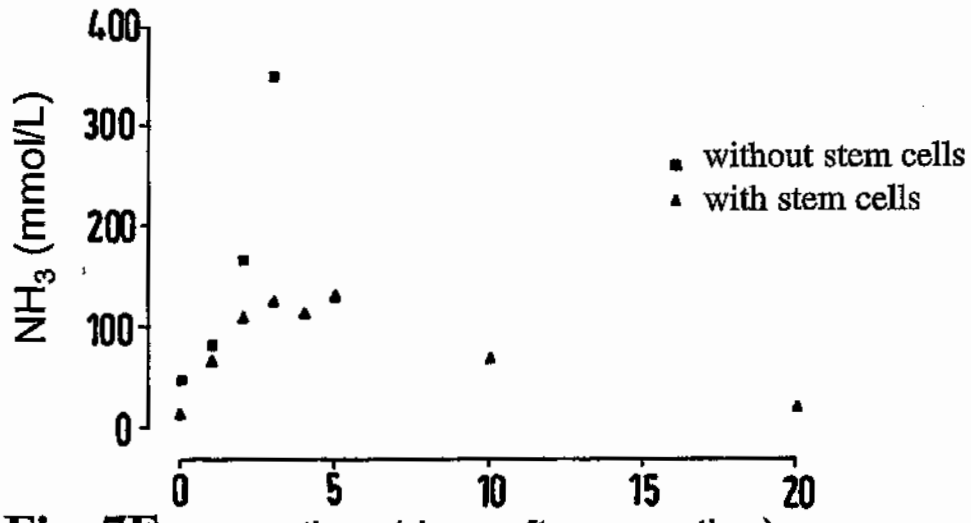


Fig. 7E

Fig. 8: Insulin producing Cells

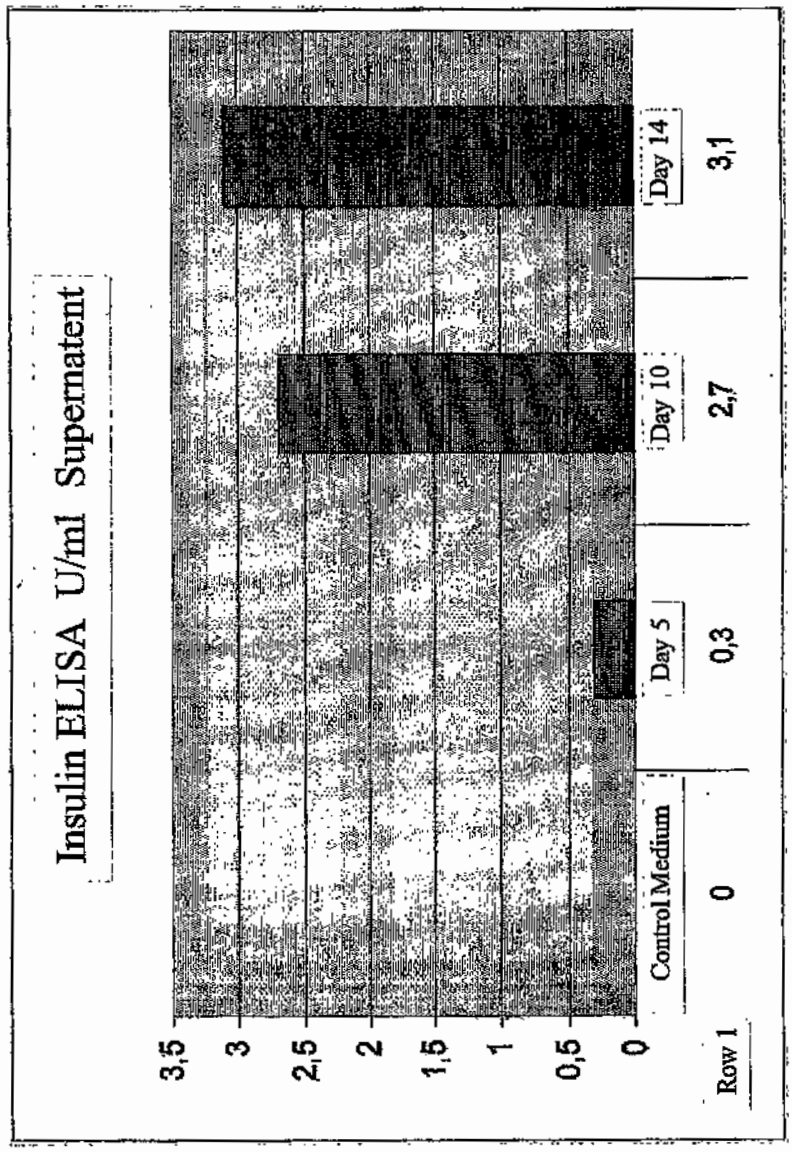


Fig. 9: Albumin Production of Hepatocyte like Cells
Time Course

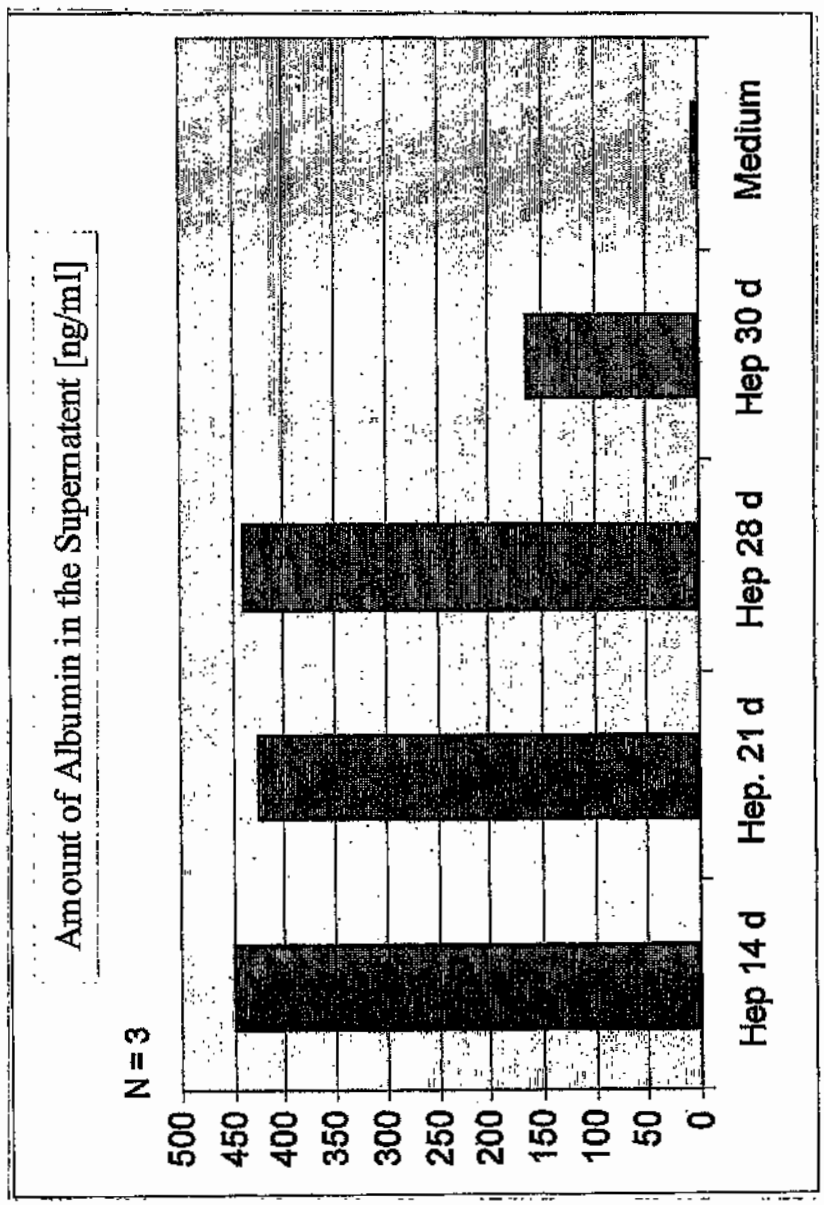


Fig. 10: Hepatocytes derived from Monocytes

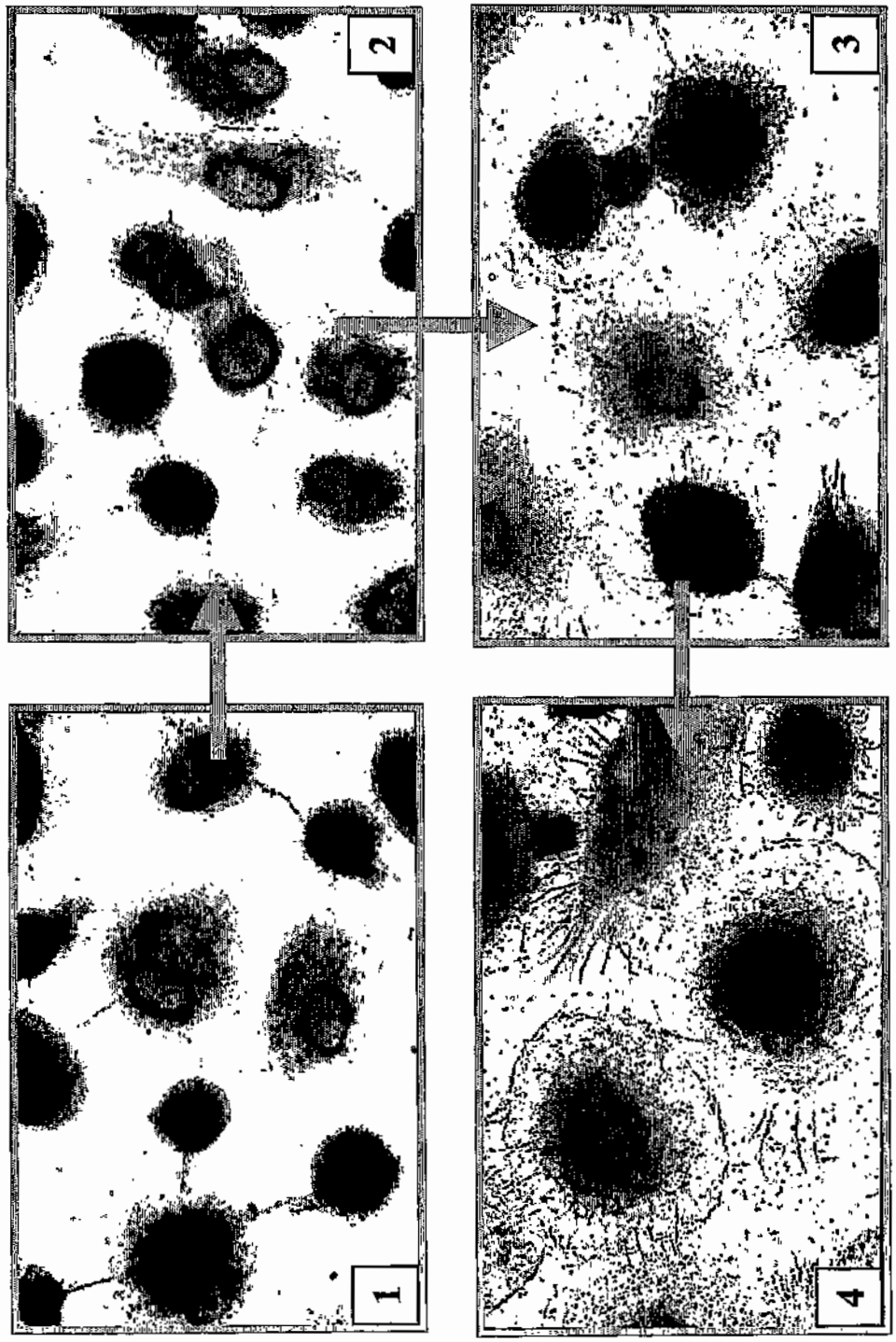


Fig. 11: FACS Analysis

