

## Supplementary Information for

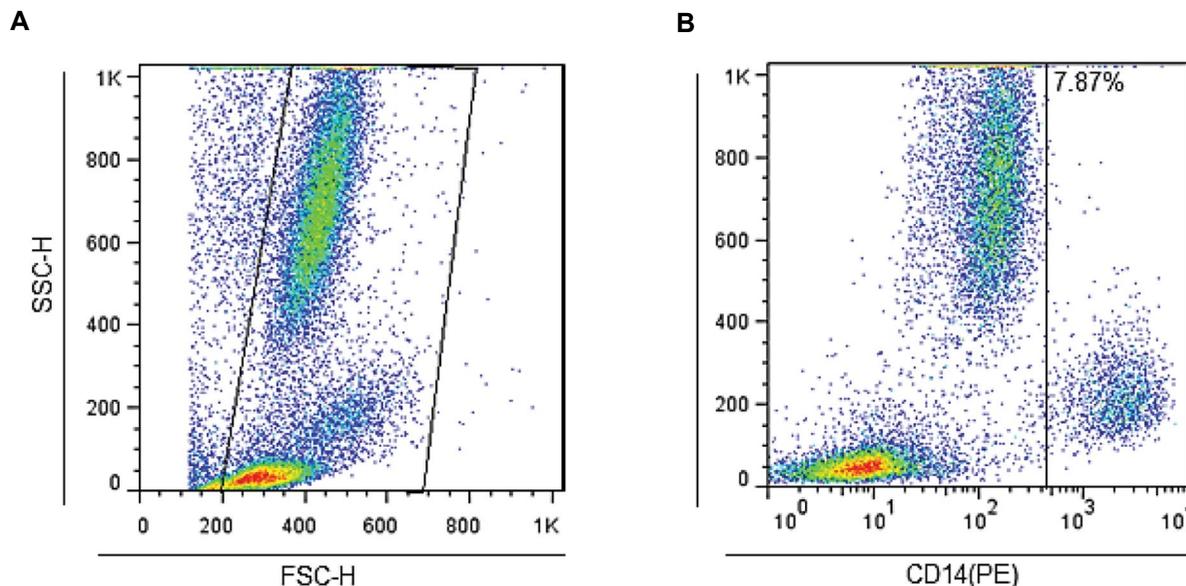
# Umbilical Cord Blood-Derived Monocytes as A Reliable Source of Functional Macrophages for Biomedical Research

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**Fig.S1:** Frequency of monocytes in UCB. The percentage of CD14<sup>+</sup> cells in umbilical cord blood was analyzed by flow cytometry. **A.** Forward scatter versus side scatter of total leukocytes. **B.** The mean percentage of CD14<sup>+</sup> cells in gated total leukocytes of umbilical cord blood samples from at least eight different healthy donors.

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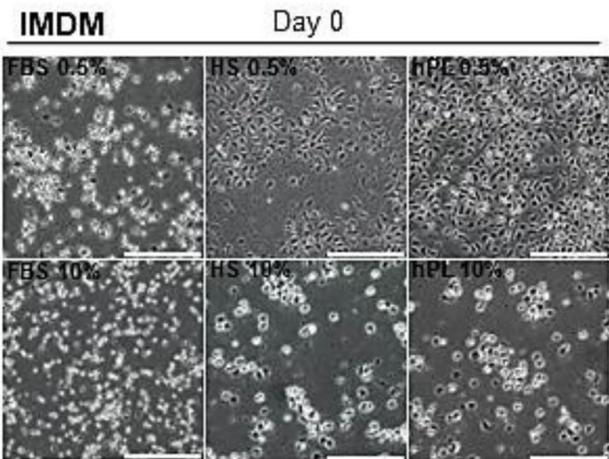
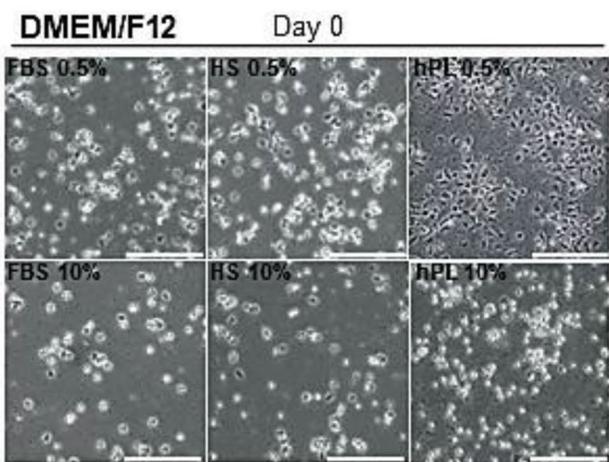
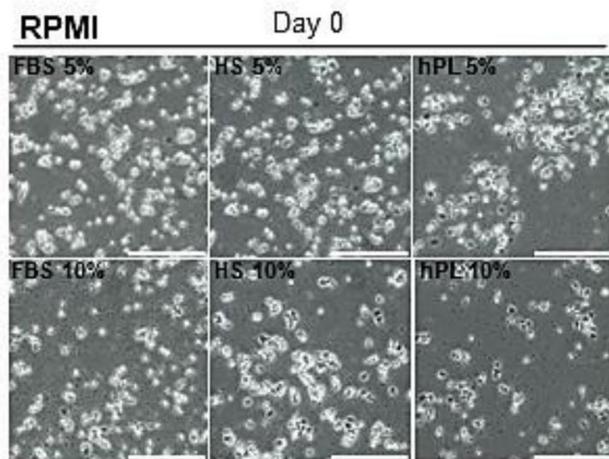
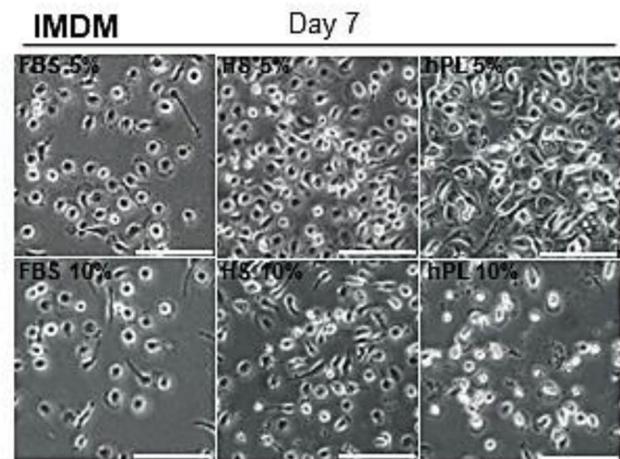
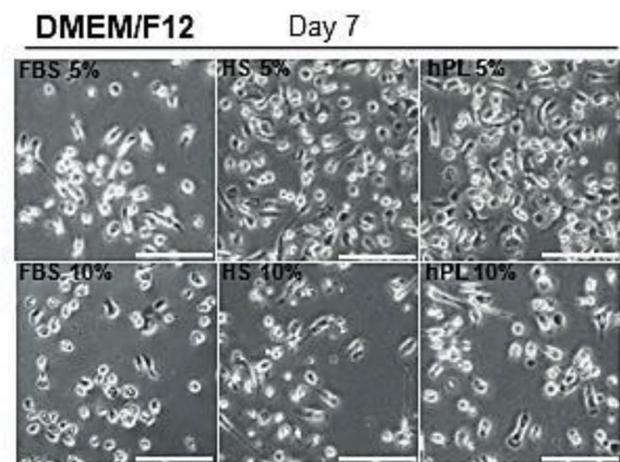
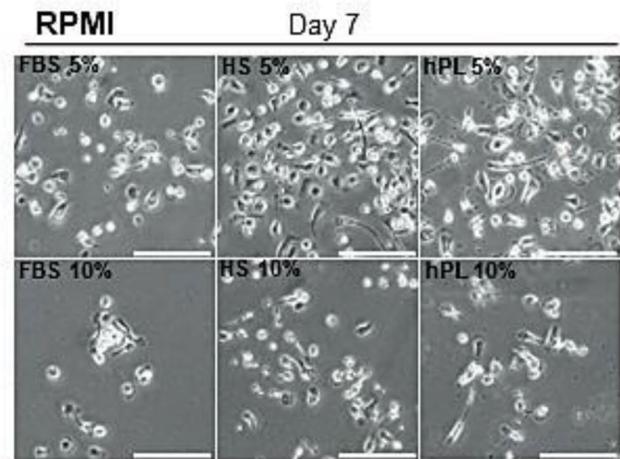
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**Fig.S2:** Phenotype and adhesion of monocyte and differentiated macrophages. **A.** The phenotype and adhesion of isolated monocyte in different three media (RPMI, DMEM/F12 and IMDM) in the presence of low (0.5%) or high (10%) percent of different serums (FBS, HS and hPL). **B.** The phenotype and adhesion of differentiated macrophages after seven days of cultivation in different three medium (RPMI, DMEM/F12, and IMDM) with different percentages of FBS, HS, and hPL. FBS; Fetal bovine serum, HS; Human serum, hPL; Human platelet lysate. Data showed that monocyte adhesion to the plate was significantly increased in the presence of a low concentration of serum and macrophages cultivated in IMDM supplemented with 5% hPL exhibited the typical morphology of matured macrophages (scale bar: 100  $\mu$ m).

**Table S1:** The polymerase chain reaction (PCR) primer sequences

<b>Name</b>	<b>Primer sequence (5' - 3')</b>	<b>Annealing temperature (°C)</b>	<b>Product size (bp)</b>
<i>IL-10</i>	F: TGCAAAACCAAACCACAAGA R: TCTCGGAGATCTCGAAGCAT	60	176
<i>TGF-β1</i>	F: GAAACCCACAACGAAATCTATGAC R: TAACTTGAGCCTCAGCAGAC	60	144
<i>DC-SIGN</i>	F: TCCAGAAGTAACCGCTTCACC R: AIACTGCTTGAAGCTGGGCA	60	105
<i>Fizz1</i>	F: CCTAATCCCCCTTCTCCAGC R: AGTGACAGCCATCCCAGCA	60	193
<i>CD163</i>	F: TTTGTCAACTTGAGTCCCTTCAC R: TCCCCTACACTTGTTTTAC	60	127
<i>MRC1</i>	F: CAGACACGATCCGACCCTTC R: GTCTCCGCTTCATGCCATTG	60	125
<i>CD80</i>	F: AAACCTCGCATCTACTGGCAAA R: GGTTCTTGTACTCGGGCCATA	60	87
<i>IL-1β</i>	F: CTG TCCTGCGTGTGAAAGA R: TTCTGCTTGAGAGGTGCTGA	60	180
<i>TNF-α</i>	F: GGGCCTGTACCTCATCTA R: AGACCCCTCCCAGATAGATG	60	212
<i>IL-6</i>	F: AGGAGACTTGCCTGGTGAAA R: CAGGGGTGGTTATTGCATCT	60	180