# SUPLEMENTARY FIGURES

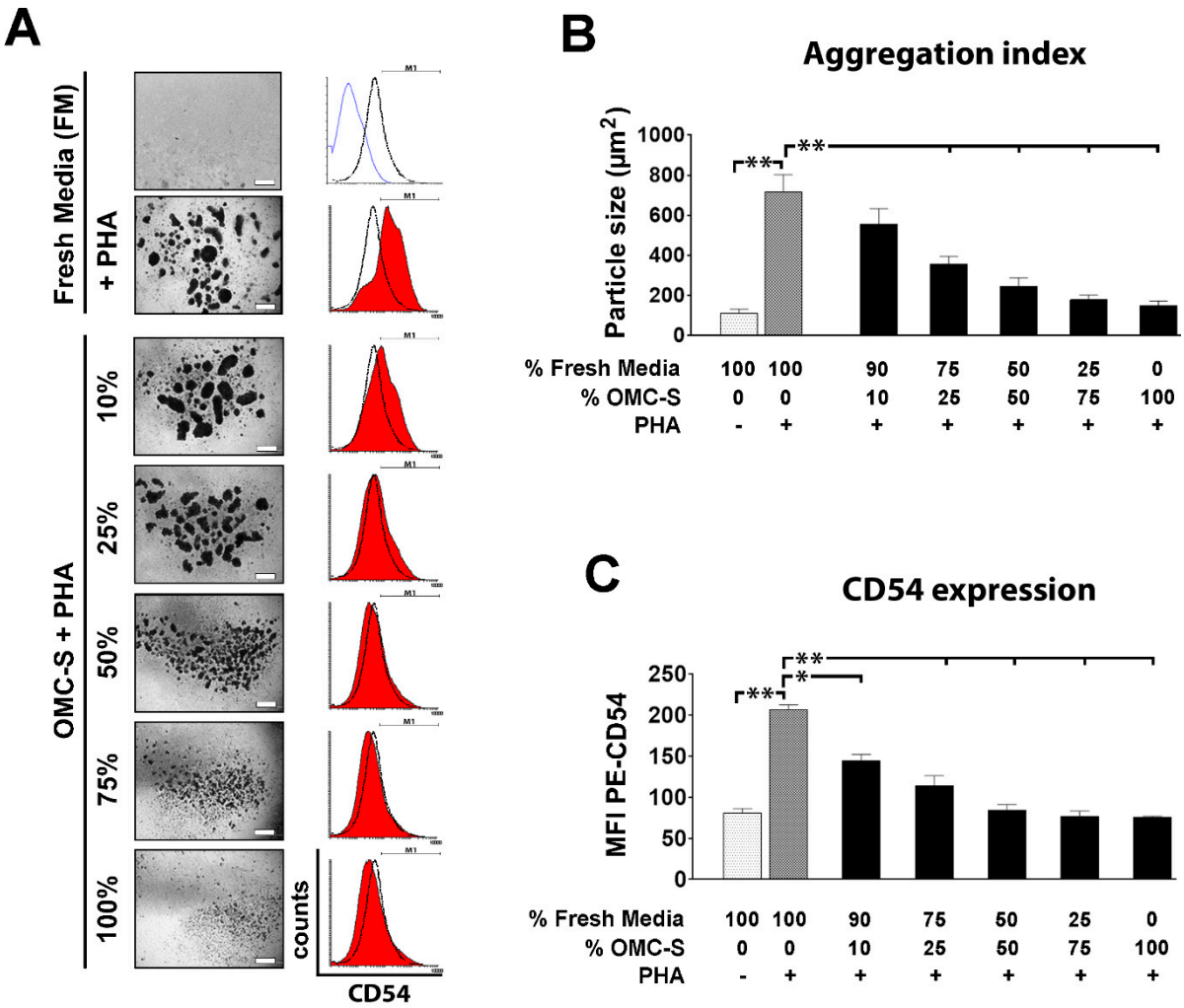


**Figure S1: OMC-derived secretome inhibits PHA-induced agglutination and CD54 expression in mouse lymph nodes lymphocytes.** (A) Left images show representative phase contrast pictures of mouse lymph nodes (LN) lymphocytes cultured for 48h either in fresh media (FM) supplemented or not with 25 µg/ml phytohemagglutinin (PHA). Note, the generation of large lymphocytes aggregates into FM supplemented with PHA. Alternatively, LN lymphocytes were cultured into increased proportions (10 to 100%) of OMC-conditioned media + PHA. Scale bar is 500 µm. Right images show corresponding flow cytometry histogram expression of intercellular adhesion molecule-1 (ICAM-1, CD54). In FM-PHA condition, blue line is for isotype expression. Dashed black line is for CD54 expression in FM-PHA condition, which is shown as reference in all PHA-stimulated conditions. Red filled histogram show CD54 expression. (B) Summary quantification of mean particle size (µm2) was performed as a direct measure of lymphocytes agglutination in response to experimental condition. (C) Summary quantification of CD54 mean fluorescent intensity (MFI) at 48h of experimental culture. (B-C) Experiment performed with (n=3) distinct OMC-S batches. Culture conditions are shown in the legend below graphs. Results are mean ± s.e.m. Statistical differences were calculated using ANOVA; * is for P≤0.05; ** is for P≤0.01.

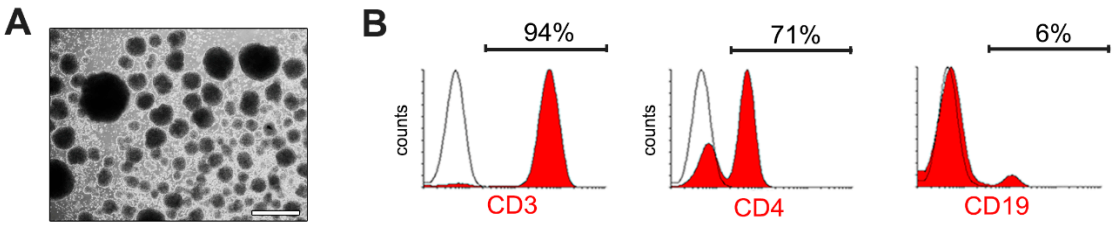


**Figure S2: Characterization of human PBMC-enriched lymphocytes after combined polyclonal activation.** (**A**) Shows representative aspect of PBMC-enriched lymphocytes subjected to a combined polyclonal CD3/CD28- and PHA-mediated activation (TCR and PHA) and cultured for 6 days. Lymphocytes grew as small to large floating spheroids, scale bar is 500µm. (**B**) Flow cytometric analysis of day 6 expansion cultures indicated that dissociated lymphocytes corresponded by overall majority to $CD3^+$ T cells, principally $CD4^+$ T cells, and also to a minor subpopulation of $CD19^+$ B cells.

# SUPLEMENTARY TABLES

**Table S1. List of primary and secondary antibodies**

| ANTIBODY | REF | DILUTION | COMPANY |
|---|---|---|---|
| Cytokeratin 18 | MAB3234 | 1:200 | Millipore |
| Wilm´s tumor protein 1 (WT1) | M3561 | 1:100 | Dako |
| β-catenin | 9581 | 1:200 | Cell Signalling |
| Goat anti-mouse AF488 | A11029 | 1:300 | Life Technologies |
| Goat anti-rabbit AF488 | A11034 | 1:300 | Life Technologies |

**Table S2. List of human conjugated antibodies.**

| ANTIBODY | DILUTION | REF | COMPANY |
|---|---|---|---|
| FITC Mouse anti-human CD45 | (1:50) | 345808 | BD |
| FITC Mouse anti-human CD31 | (1:50) | 555445 | BD |
| FITC Mouse anti-human HLA-DR, DP, DQ | (1:50) | 555558 | BD |
| PE Mouse anti-human CD13 | (1:50) | 347406 | BD |
| PE Mouse anti-human CD29 | (1:50) | 555443 | BD |
| PE Mouse anti-human CD44 | (1:50) | 550989 | BD |
| PE Mouse anti-human CD73 | (1:50) | 550257 | BD |
| FITC Mouse Anti-Human CD90 | (1:50) | 555595 | BD |
| PE Mouse anti-human CD105 | (1:50) | 560839 | BD |
| PE Mouse anti-human CD166 | (1:50) | 559263 | BD |
| PE Mouse anti-human CD54 | (1:50) | 560971 | BD |
| PE Mouse anti-human CD3 | (1:100) | 555333 | BD |
| FITC Mouse anti-human CD4 | (1:100) | 555346 | BD |
| FITC Mouse anti-human CD8 | (1:100) | 555366 | BD |
| FITC Mouse anti-human CD19 | (1:100) | 555412 | BD |
| APC Mouse anti-human CD25 | (1:100) | 561399 | BD |
| FITC Mouse IgG1, k | | 555748 | BD |
| FITC Mouse IgG2a,k | | 555573 | BD |
| FITC Mouse IgG2b,k | | 555742 | BD |

| | | | |
|---|---|---|---|
| PE Mouse IgG1, k | | 555749 | BD |

**Table S3**. **List of mouse conjugated antibodies**

| ANTIBODY | DILUTION | REF | COMPANY |
|---|---|---|---|
| FITC Rat anti-mouse CD11b | 1:100 | 553310 | BD |
| PE Rat anti-mouse CD54 | 1:100 | 553253 | BD |
| PerCP-CyTM Hamster anti-mouse CD80 | 1:100 | 560526 | BD |
| PE Rat anti-mouse CD86 | 1:100 | 561963 | BD |
| PE Rat anti-mouse CD206 | 1:100 | 141705 | Biolegend |
| BB515 Rat anti-mouse CD25 | 1:50 | 564424 | BD |
| FITC Rat anti-mouse CD3 | 1:50 | 555274 | BD |
| PE Rat anti-mouse CD4 | 1:50 | 553049 | BD |
| PE Rat anti-mouse CD8 | 1:50 | 553032 | BD |
| PE Rat anti-mouse CD19 | 1:100 | 557399 | BD |
| PerCP-Cy™5.5 Hamster IgG2, κ | 1:100 | 560562 | BD |
| PE Rat IgG2a, k | 1:100 | 553930 | BD |
| BB515 Rat IgG1, λ | 1:50 | 564417 | BD |
| FITC Rat IgG2b, κ Isotype Control | 1:100 | 553988 | BD |
| PE Rat IgG2b, k | 1:100 | 553989 | BD |

**Table S4**: **Composition of adipogenic, chondrogenic and osteogenic differentiation media.**

| Adipogenic medium | Chondrogenic medium | Osteogenic medium |
|---|---|---|
| DMEM low glucose (Gibco) | DMEM low glucose (Gibco) | DMEM low glucose (Gibco) |
| 10 % FBS (Hyclone) | 1 % FBS (Hyclone) | 10 % FBS (Hyclone) |
| 1% P/S antibiotics (Gibco) | 1% P/S antibiotics (Gibco) | 1% P/S antibiotics (Gibco) |
| 1X ITS (Gibco) | 1X ITS (Gibco) | 10 µM dexamethasone (Sigma; D4902) |
| 1 µM dexamethasone (Sigma; D4902) | 10 ng/ml rec. hum. TGF-ß1 (Peprotech; 100-21C) | 50 µg/ml Ascorbic acid (Sigma; A7506) |
| 250 µm 3-Isobutyl-1-methylxanthine (IBMX; Sigma; I7018) | 50 ng/ml ascorbic acid (Sigma; A7506). | 10 mM beta-glycerophosphate (Sigma; G9891) |
| 250 µm indomethacin (Sigma; I7378) | | |
| **DETECTION DIFFERENTIATION** | | |
| Oil red (Sigma; O0625) | Alcian blue 8GX (Sigma; A5268) | SIGMAFAST BCIP/NBT substrate (Sigma; B5655) |

**Table S5**: **List of primers used in the study**

| Gene | Forward (5´--- 3´) | Reverse (5´--- 3´) |
|---|---|---|
| **IL-6** | ACTCACCTCTTCAGAACGAATTG | CCATCTTTGGAAGGTTCAGGTTG |
| **TGFβ** | CTAATGGTGGAAACCCACAACG | TATCGCCAGGAATTGTTGCTG |
| **IL-12a** | CCTTGCACTTCTGAAGAGATTGA | ACAGGGCCATCATAAAAGAGGT |
| **COX2** | TAAGTGCGATTGTACCCGGAC | TTTGTAGCCATAGTCAGCATTGT |
| **CXCL1** | AACCGAAGTCATAGCCACAC | GTTGGATTTGTCACTGTTCAGC |
| **IDO** | GCCAGCTTCGAGAAAGAGTTG | ATCCCAGAACTAGACGTGCAA |
| **ARG1** | TGGACAGACTAGGAATTGGCA | CCAGTCCGTCAACATCAAAACT |
| **IL-5** | TCTACTCATCGAACTCTGCTGA | CCCTTGCACAGTTTGACTCTC |
| **IL-1β** | ATGATGGCTTATTACAGTGGCAA | GTCGGAGATTCGTAGCTGGA |
| **iNOS** | TTCAGTATCACAACCTCAGCAAG | TGGACCTGCAAGTTAAAATCCC |
| **IL-2** | TCCTGTCTTGCATTGCACTAAG | CATCCTGGTGAGTTTGGGATTC |
| **IFNγ** | TCGGTAACTGACTTGAATGTCCA | TCGCTTCCCTGTTTTAGCTGC |
| **IL-15** | TTTCAGTGCAGGGCTTCCTAA | GGGTGAACATCACTTTCCGTAT |
| **IL-4** | ATGGGTCTCACCTCCCAACT | GATGTCTGTTACGGTCAACTCG |
| **TNFα** | CCTCTCTCTAATCAGCCCTCTG | GAGGACCTGGGAGTAGATGAG |
| **LGALS9** | GGGCGCAGACAAAAACCTC | GGAGTAGAGAACATCTGTCCAGG |
| **IL-10** | TCAAGGCGCATGTGAACTCC | GATGTCAAACTCACTCATGGCT |
| **GAPDH** | AGCCACATCGCTCAGACAC | GCCCAATACGACCAAATCC |

*Abbreviations*: **IL-6**, interleukin 6; **TGFβ**, transforming growth factor-beta; **IL-12a**, interleukin 12 alpha; **Cox2**, cyclooxygenase-2; **CXCL1**, chemokine (C-X-C motif) ligand 1; **IDO**, Indoleamine-2,3-dioxygenase; **ARG1**, arginase I; **IL-5**, interleukin 5; **IL-1β**, interleukin 1 beta; **iNOS**, inducible nitric oxide synthase; **IL-2**, interleukin 2; **IFNγ**, Interferon gamma; **IL-15**, interleukin 15; **IL-4**, interleukin 4; **TNFα**, tumor necrosis factor alpha; **LGALS9**, galectin 9; **IL-10**, interleukin 10; **GAPDH**, Glyceraldehyde 3-phosphate dehydrogenase.