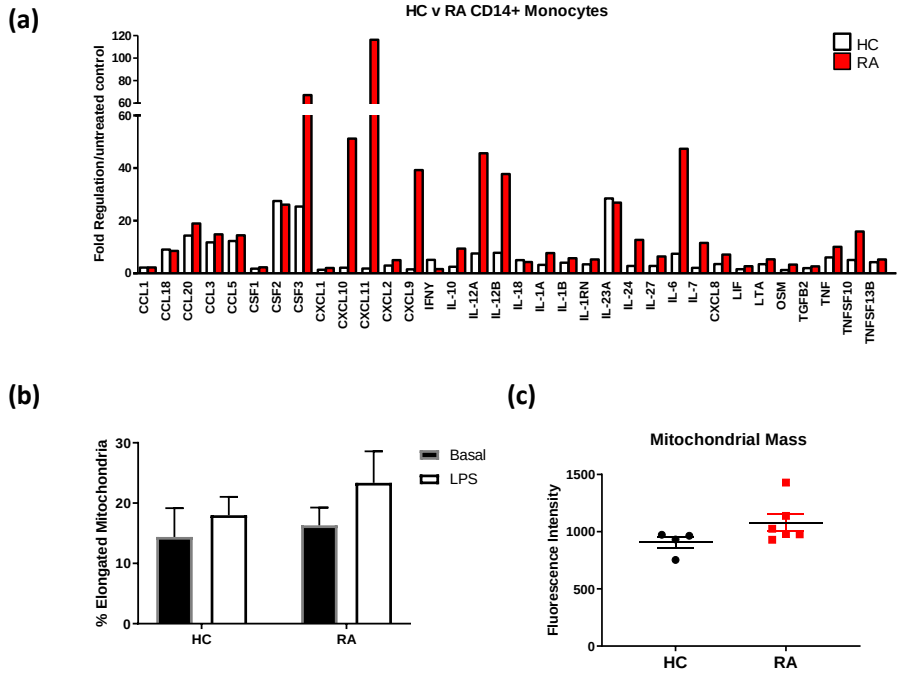
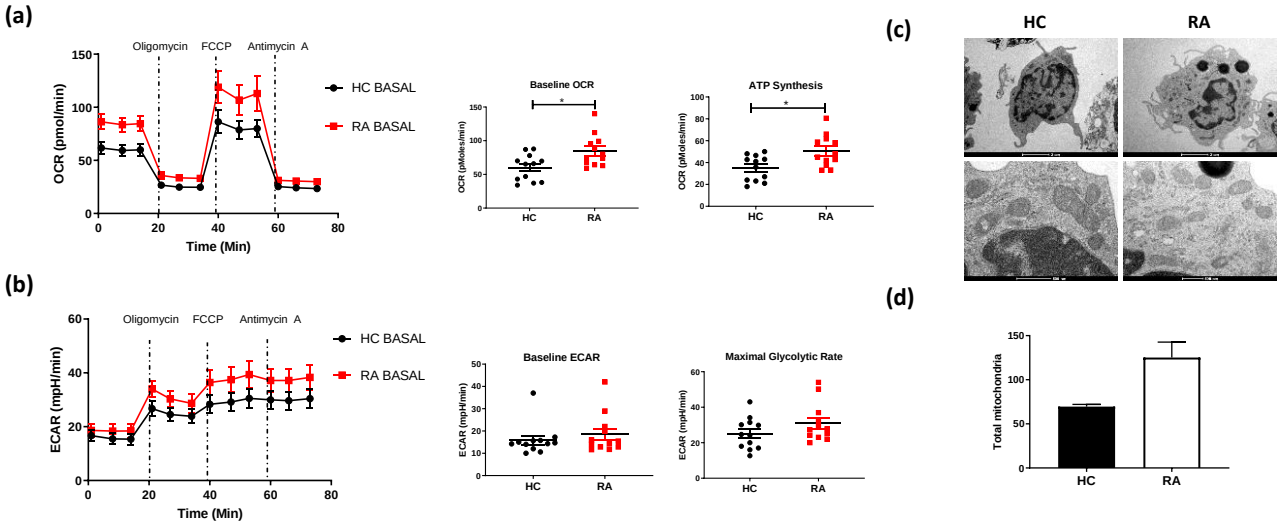
Gene Name	Forward Primer	Reverse Primer
RPLPO	5’ GCGTCCTCGTGGAAGTGACATCG 3’	5’ TCAGGGATTGCCACGCAGGG 3’
HPRT1	5’ ATGGACAGGACTGAACGTCTTG 3’	5’ GGCTACAATGTGATGGCCTC 3’
TNFα	5’ ACCTCTCTCTAATCAGCCCTC 3’	5’ GGTTCGAGAAGATGATCTGACTG 3’
IL-6	5’ CCCTGAGAAAGGAGACATGTAAC 3’	5’ CCTCTTTGCTGCTTTCACACATG 3’
IL-1β	5’ CTCAAGTGTCTGAAGCAGCCAT 3’	5’ CATCATTTCACTGGCGAGCTCA 3’
OSM	5’ ACTCCTGGACCCCTATATACG 3’	5’ AGTGCTCTCTCAGTTTAGGAACAT 3’
CXCL10	5’ TTCAAGGAGTACCTCTCTCTAGAA 3’	5’ GGTTGATTACTAATGCTGATGCAG 3’
CXCL11	5’ GGCTTCCCCATGTTCAAAAGAG 3’	5’ TCTCAATATCTGCCACTTTCACTG 3’
IL-27	5’ CTTTGCGGAATCTCACCTGCC 3’	5’ AGGGAAACATCAGGGAGCTGC 3’
IL-8	5’ TTGGCAGCCTTCCTGATTTC 3’	5’ TGGCAAAACTGCACCTTCAC 3’
PFKFB3	5’ ACCAAAGATCACCCACGGATGT 3’	5’ AGCGAGTGCAGAATGGACACAA 3’
HK2	5’ TTCTTGTCTCAGATTGAGAGTGAC 3’	5’ TTGCAGGATGGCTCGGACTTG 3’
HIF1α	5’ GAAACTTCTGGATGCTGGTGATTT 3’	5’ GCAATTCATCTGTGCTTTCATGTCA 3’
STAT3	5’ TTCACTTGGGTGGAGAAG 3’	5’ CGGACTGGATCTGGGTCT 3’
IL-1α	5’ CAAAGAAGTCAAGATGGCCAA 3’	5’ CTGTAACAGTTCTTCAGGTCT 3’

Supplementary table 1: List of designed primers for real-time PCR analysis



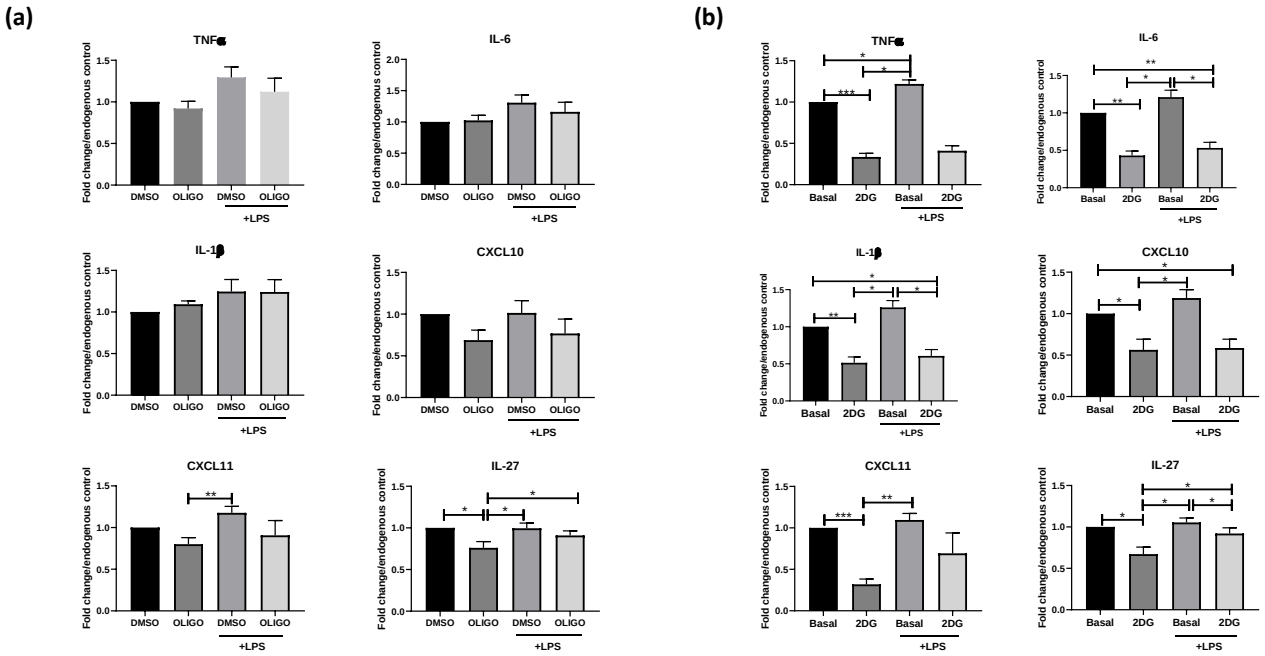
Supplementary figure 1:

(a) Bar graph demonstrating 34 cytokine/chemokine genes upregulated in response to 3 hr LPS stimulation (100 ng mL^{-1}) in healthy and RA $CD14^+$ monocytes (n=3). **(b)** Gating strategy for identification of $CD14^+$ monocytes in blood. **(c)** Bar graphs demonstrating the frequency of elongated mitochondria as a percentage of total mitochondria present in HC (n=3) and RA (n=3) $CD14^+$ monocytes +/- LPS. Data expressed as mean ± SEM.



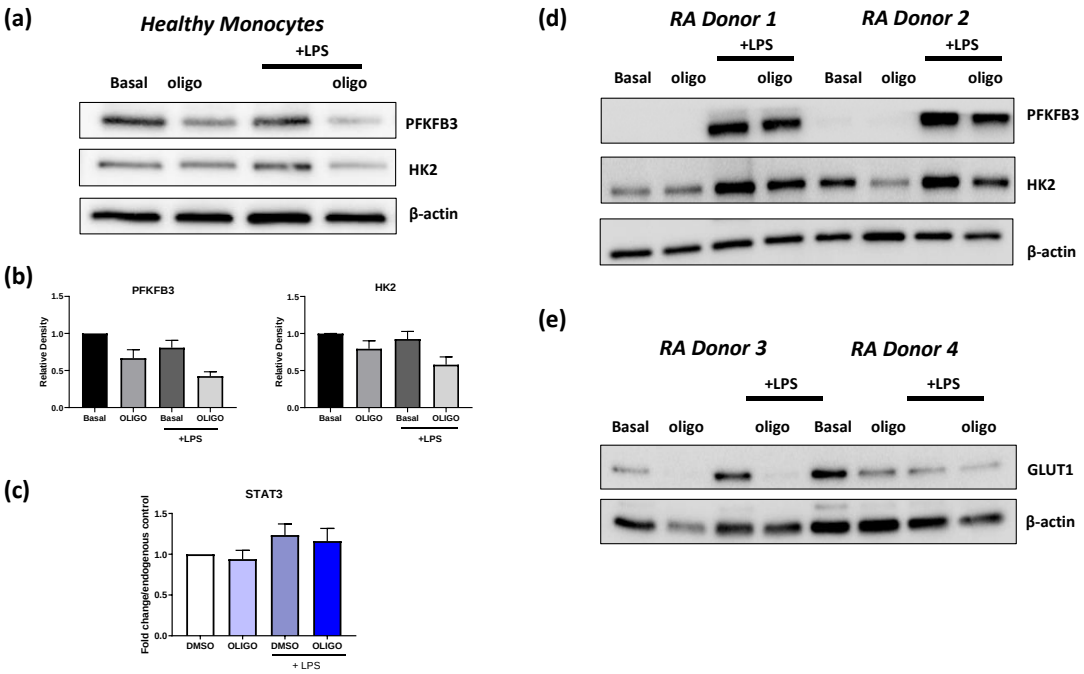
Supplementary figure 2:

(a) Seahorse bioenergetics profile (average) OCR of healthy (n=12) and RA (n=12) monocytes before and after injections of oligomycin, FCCP and antimycin A in *ex vivo* resting monocytes with dot plots depicting baseline OCR and ATP synthesis. **(b)** Seahorse bioenergetics profile (average) ECAR of healthy (n=12) and RA (n=12) monocytes before and after injections of oligomycin, FCCP and antimycin A in *ex vivo* resting monocytes with dot plots depicting baseline ECAR and Maximal Glycolytic Rate. **(c)** Representative TEM images of healthy control and RA *ex vivo* resting monocytes. Scale bar represents 2 µm and 500 nm. **(d)** Bar graphs represent quantification of total mitochondria present in HC (n=3) and RA (n=3) $CD14^{+}$ resting monocytes. Data expressed as mean ± SEM, Mann-Whitney *U*-test and two-way ANOVA used as appropriate, $*P < 0.05$.



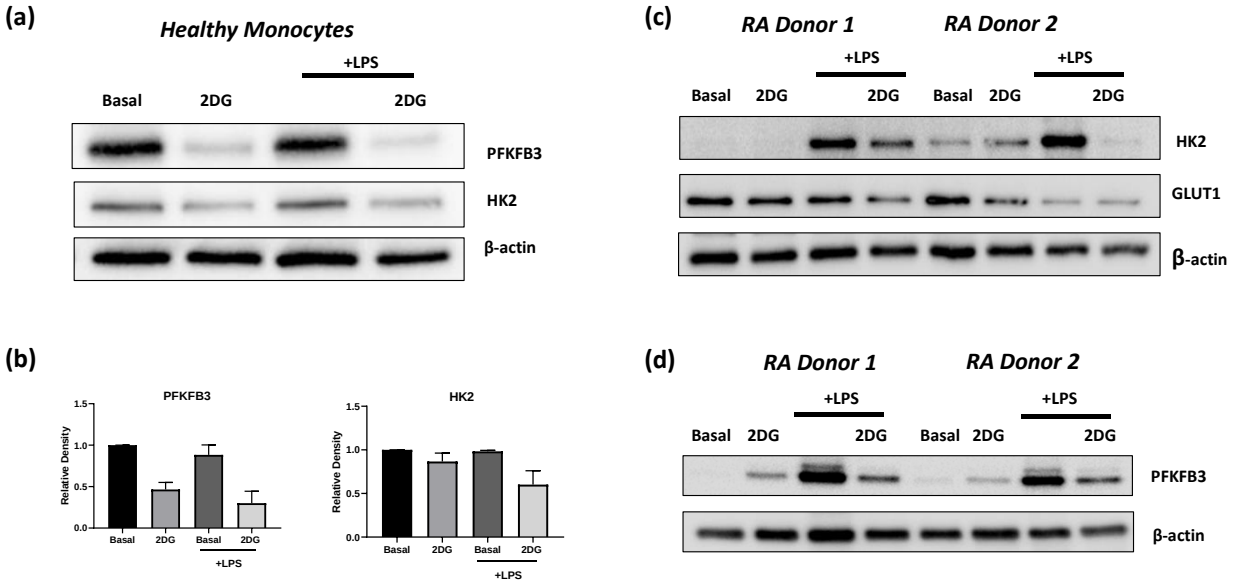
Supplementary figure 3:

HC monocytes stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- **(a)** oligomycin (n=5) and **(b)** 2DG (n=4 or 5). Gene expression of *TNFα, IL-6, IL-1β, CXCL10, CXCL11 and IL-27*. Data expressed as mean ± SEM, paired t-test used, **P* < 0.05, ***P* < 0.01, ****P* < 0.005.



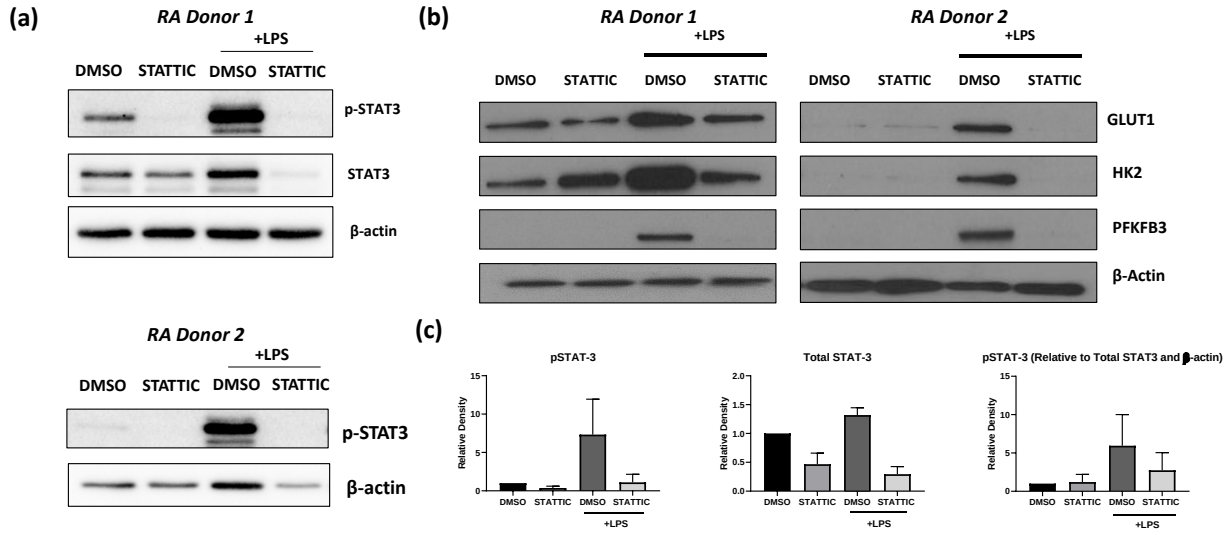
Supplementary figure 4:

Representative western blots demonstrating HK2 and PFKFB3 protein expression in HC $CD14^+$ monocytes stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- **(a)** oligomycin and **(c)** 2DG. Bar graphs representing densitometry quantification of PFKFB3 and HK2 normalized to β-actin in HC $CD14^+$ monocytes stimulated with LPS (100 ng/mL) for 3 hr +/- **(b)** oligomycin (n=4) and **(d)** 2DG (n=4). Data expressed as mean ± SEM.



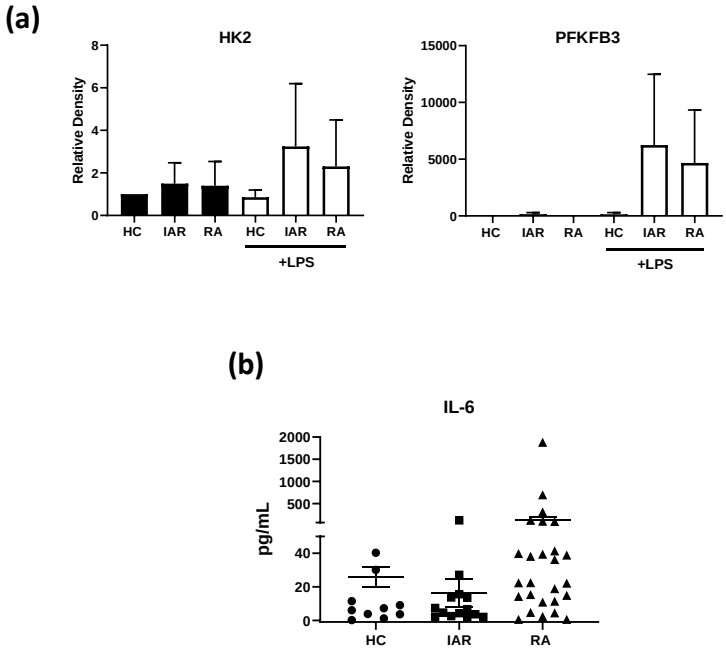
Supplementary figure 5:

Western blots demonstrating HK2 and PFKFB3 protein expression in two independent RA $CD14^+$ patient monocytes stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- **(a)** oligomycin (n=2) and **(b)** 2DG (n=2). **(c)** *STAT3* gene expression in response to LPS +/- oligomycin in RA $CD14^+$ monocytes (n=7). Data represented as mean ± SEM.



Supplementary figure 6:

(a) Western blots demonstrating pSTAT3 protein expression in RA $CD14^+$ monocytes (n=2) stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- STATTIC. **(b)** Bar graphs representing densitometry quantification of pSTAT3 normalized to β-actin in RA $CD14^+$ monocytes (n=2) stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- STATTIC. **(c)** Western blots demonstrating HK2, PFKFB3 and GLUT1 protein expression in two independent RA $CD14^+$ patient monocytes stimulated with LPS (100 ng mL^{-1}) for 3 hr +/- STATTIC (n=2). Data expressed as mean ± SEM.



Supplementary Figure 7:

(a) Bar graphs representing densitometry quantification of HK2 and PFKFB3 normalized to β-actin in HC (n=2), IAR (n=2) and RA (n=2) $CD14^{+}$ monocytes following activation with LPS. **(b)** Dot plot representing expression of secreted IL-6 in HC (n=15), IAR (n=14) and RA (n=31) patient serums.