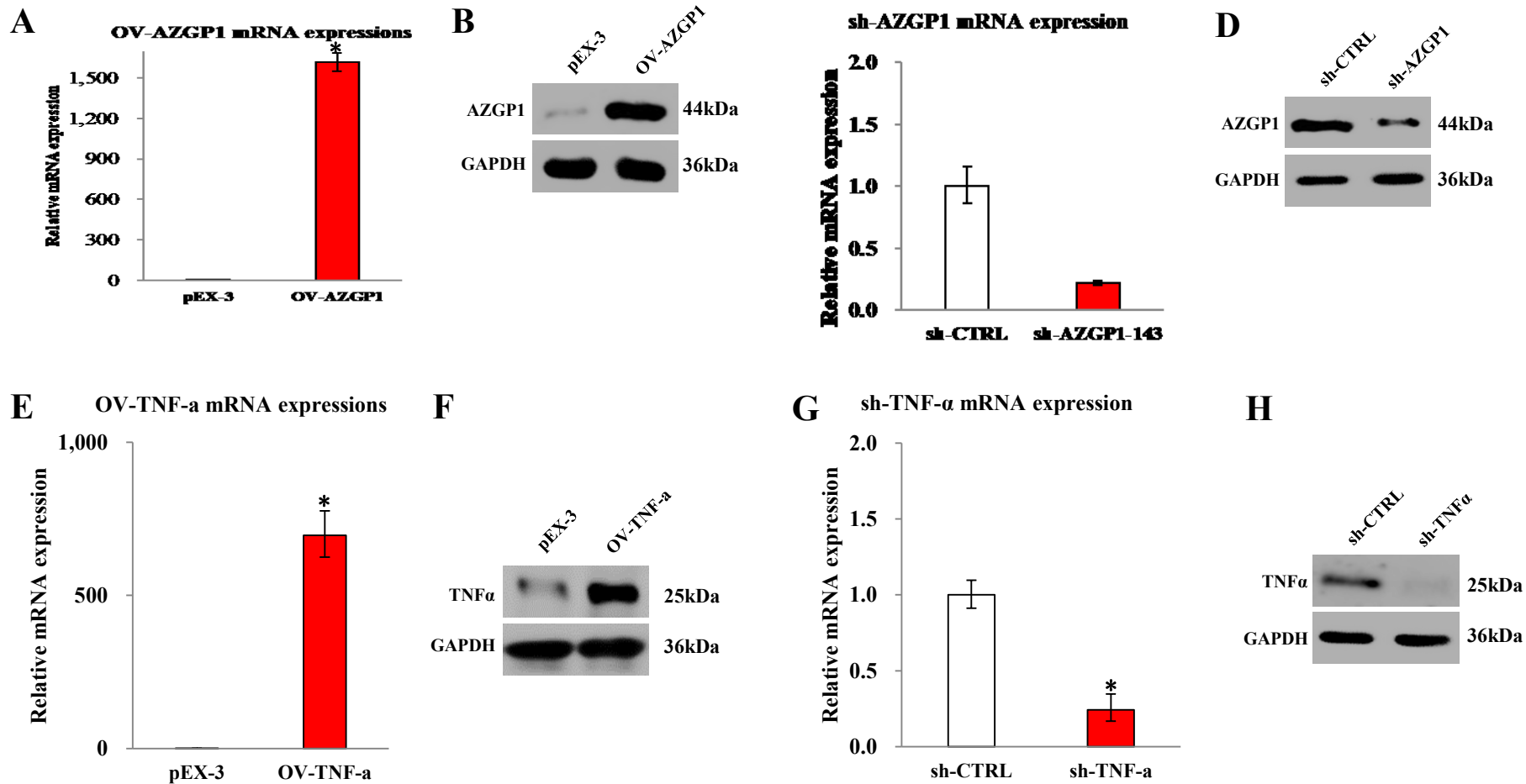


Suppl. Fig S-1



Suppl. Fig S-1 The transfection efficiency of LO2 cells. The transfection efficiency of OV-AZGP1 plasmid was elevated by 1615 times and 5.698 times in mRNA and protein levels respectively (A-B); the sh-AZGP1 transfection efficiency was 78.2% and 71.1% in mRNA and protein levels separately (C-D). The transfection efficiency of OV-TNF-α plasmid was elevated by 696 times and 3.286 times in mRNA and protein levels respectively (E-F); the sh-TNF-α transfection efficiency was 75.7% and 78.3% in mRNA and protein levels respectively (G-H). *means compared with pEX-3 or sh-CTRL cells, $p < 0.05$

Suppl Table S-1: Information of Plasmids

Name of the plasmid	Species	Application	Name of the carrier	Corp.	cDNA sequence
pEX-3	human	in vitro	pEX-3	Shanghai GenePharma Co. Ltd, Shanghai, China	none
OV-AZGP1	human	in vitro	pEX-3	Shanghai GenePharma Co. Ltd, Shanghai, China	<p>atggtaag aatggctcct gtctgtgtctgtctgtct gctctgggt cctgctgtcc cccaggagaa ccaagatggt cgctactcttgacctatata ctacctggg ctgtccaagc atgttgaaga cgtccccgcg ttccaggcccttgctcact caatgacctc cagttcttta gatacaacag taaagacagg aagtctcagccatgggact ctggagacag gtggaaggaa tggaggattg gaagcaggac agccaactcagaaggccag ggaggacatc ttatggaga cctgaaaga catcgtggag tattacaacgacagtaacgg gtctcacgta ttgacaggaa ggtttggtg tgagatcgag aataacagaagcagcggagc attctggaaa tattactatg atggaaggaa ctacattgaa ttcaacaagaaatcccagc ctgggtcccc ttgaccagc cagcccagat aaccaagcag aatgggagcagaaccagt ctactgtcag cgggccaaagg ctacctgga ggaggagtgc cctgcgactcgcgaaata cctgaaatac agcaaaaata tcttggaccg gcaagatcct ccctctgtgtgtgctaccag ccaccaggcc ccaggagaaa agaagaaatc gaagtgcctg gcctacgacttctaccagc gaaaattgat gtgactgga ctgggcccgg cgaggtgcag gagcctgagttacggggaga tgttctcac aatggaaatg gcacttacca gtctgggtg gtggtggcagtgcccccgca ggacacagcc ccctactct gccacgtgca gcacagcagc ctggcccagcccctgtggt gccctgggag gccagctag</p> <p>atgagcactgaaa gcatgatccg ggacgtggag ctggccgagg aggcgctccc caagaagaca ggggggcccc agggctccag gcggtgcttg ttctcagcc ttcttctctt cctgatcgtg gcaggcgcca ccagctctt ctgctgtctg cactttggag tgatggccc ccagagggaa gattccccca gggacctctc tctaatcagc cctctggccc aggcagtcag atcatctct cgaaccccga gtgacaagcc tgtagcccat gtttagcaa accctcaagc tgggggcag ctccagtggc tgaaccgccc ggccaatgcc ctctggcca atggcgtgga gctgagagat aaccagctgg tggtgccatc agaggcctg tacctcatct actcccaggt cctctcaag ggccaaggt gccctccac ccatgtgctc ctaccaca ccatcagccg catcgcctc tctaccaga ccaaggtcaa cctctctct gccatcaaga gccctgcca gaggagacc ccagaggggg ctgaggccaa gccctggtat gagccatct atctgggagg ggtctccag ctggagaagg gtgaccgact cagcgtgag atcaatcggc ccgactatct cgactttgcc gagtctggg aggtctact tgggatcatt gcctgtga</p>
OV-TNF α	human	in vitro	pEX-3	Shanghai GenePharma Co. Ltd, Shanghai, China	<p>atggtgcctgtctgtgtcctcctctcc ttctgggtc tgcagtctt caggagactg ggtcttatta tctgacctt ctctacaccg ggtgtccag acccagcaaa ggtttccga ggttcaagc cactgcatt ctcaatgacc aggcctctt ccaactacaac agcaacagcc ggaaggcaga gcctgtggga ccttgagcc aggtggaagg aatggaggac tgggagaagg aaagccagct tcagagggcc agggaggaga tcttcttgt gacctgaaa gacatcatgg actattacaa ggacactaca ggtgtcaca ctttcaggg aatgtttggt tgcgagatca caaataacag aagtgtgga gctgtctgga ggtatgccta cgacggagag gatttcacg aattcaacaa agaaatccca gcttgatcc ccttagacc agcagctgca aaccaaacg taaagtggga agcagaaaag gtctactgac agcgagccaa ggcataccta gaggaggagt gtctgaaat gctgaagagg tacctgaact acagtcgac tcacctggac cgaatagat ctcccactg gacaatcacc agccgtgta tcccaggagg aaacagaata ttcaaatgcc tggcctatgg ctctaccaca caaagaatta gtctgactg gaacaaggcc aacaaagaag tagcattga accagaaga ggtgttttc ccaatggaaa tggcacttac ctctcctggg cagaggtgga agtctccca caggacatag acccctctt ctgctcata gatcacagg ggttttccca atctctctg gtgagtgagg ataggacaag aaaagtaag gatgaaaca atgtgtgac tcagcctcag taa</p>
GV315	mouse	in vivo	GV315	Shanghai Genechem Co. Ltd, Shanghai, China	none
OV-AZGP1	mouse	in vivo	GV315	Shanghai Genechem Co. Ltd, Shanghai, China	<p>atggtgcctgtctgtgtcctcctctcc ttctgggtc tgcagtctt caggagactg ggtcttatta tctgacctt ctctacaccg ggtgtccag acccagcaaa ggtttccga ggttcaagc cactgcatt ctcaatgacc aggcctctt ccaactacaac agcaacagcc ggaaggcaga gcctgtggga ccttgagcc aggtggaagg aatggaggac tgggagaagg aaagccagct tcagagggcc agggaggaga tcttcttgt gacctgaaa gacatcatgg actattacaa ggacactaca ggtgtcaca ctttcaggg aatgtttggt tgcgagatca caaataacag aagtgtgga gctgtctgga ggtatgccta cgacggagag gatttcacg aattcaacaa agaaatccca gcttgatcc ccttagacc agcagctgca aaccaaacg taaagtggga agcagaaaag gtctactgac agcgagccaa ggcataccta gaggaggagt gtctgaaat gctgaagagg tacctgaact acagtcgac tcacctggac cgaatagat ctcccactg gacaatcacc agccgtgta tcccaggagg aaacagaata ttcaaatgcc tggcctatgg ctctaccaca caaagaatta gtctgactg gaacaaggcc aacaaagaag tagcattga accagaaga ggtgttttc ccaatggaaa tggcacttac ctctcctggg cagaggtgga agtctccca caggacatag acccctctt ctgctcata gatcacagg ggttttccca atctctctg gtgagtgagg ataggacaag aaaagtaag gatgaaaca atgtgtgac tcagcctcag taa</p>
sh-CTRL	human	in vitro	pGPU6	Shanghai GenePharma Co. Ltd, Shanghai, China	TTCTCCGAACGTGTACAGT
sh-AZGP1	human	in vitro	pGPU6	Shanghai GenePharma Co. Ltd, Shanghai, China	GGCCCTTGCTCACTCAATGA
sh-TNF α	human	in vitro	pGPU6	Shanghai GenePharma Co. Ltd, Shanghai, China	GCCTGTAGCCCATGTTGTAGC

Suppl Table S-2-1: Human Primers of qPCR

Gene	Primers	
β -actin	F:5'-CATGTACGTTGCTATCCAGGC-3' R:5'-CTCCTTAATGTCACGCACGAT-3'	250bp
AZGP1	F:5'-AACCAAGATGGTCGTTACTCTCT-3' R:5'-CCTGCTTCCAATCCTCCATTC	190bp
TNF α	F:5'-CCTCTCTCTAATCAGCCCTCTG-3' R:5'-GAGGACCTGGGAGTAGATGAG-3'	220bp
IL-1 β	F:5'-ATGATGGCTTATTACAGTGGCAA-3' R:5'-GTCGGAGATTTCGTAGCTGGA-3'	132bp
IL-6	F:5'-ACTCACCTCTTCAGAACGAATTG-3' R:5'-CCATCTTTGGAAGGTTTCAGGTTG-3'	149bp
NF- κ B	F:5'-AACAGAGAGGATTTTCGTTTCCG-3' R:5'-TTTGACCTGAGGGTAAGACTTCT-3'	104bp
MCP-1	F:5'-CAGCCAGATGCAATCAATGCC-3' R:5'-TGGAATCCTGAACCCACTTCT-3'	190bp
SREBP-1c	F:5'-ACAGTGACTTCCCTGGCCTAT-3' R:5'-GCATGGACGGGTACATCTTCAA-3'	222bp
LXR	F:5'-AGAAGATTCGGAAACAACAGCA-3' R:5'-GCTGGATCATTAGTTCTTGAGCC-3'	186bp
FAS	F:5'-TCTGGTTCTTACGTCTGTTGC-3' R:5'-CTGTGCAGTCCCTAGCTTTCC-3'	197bp
ACC	F:5'-ATGTCTGGCTTGCACCTAGTA-3' R:5'-CCCCAAAGCGAGTAACAAATTCT-3'	106bp
SCD-1	F:5'-TCTAGCTCCTATAACCACCACCA-3' R:5'-TCGTCTCCAATTATCTCCTCC-3'	82bp
FXR	F:5'-AACCATACTCGCAATACAGCAA-3' R:5'-ACAGCTCATCCCCTTTGATCC-3'	249bp
PPAR α	F:5'-ATGGTGGACACGGAAAGCC-3' R:5'-CGATGGATTGCGAAATCTCTTGG-3'	124bp
FATP	F:5'-GGGGCAGTGTCTCATCTATGG-3' R:5'-CCGATGTACTGAACCACCGT-3'	111bp
CPT-1A	F:5'-TCCAGTTGGCTTATCGTGGTG-3' R:5'-TCCAGAGTCCGATTGATTTTTGC-3'	98bp
Adiponectin	F:5'-TGCTGGGAGCTGTTCTACTG-3' R:5'-TACTCCGGTTTCACCGATGTC-3'	248bp
PCNA	F:5'-CCTGCTGGGATATTAGCTCCA-3' R:5'-CAGCGGTAGGTGTCGAAGC-3'	109bp
Cyclin D1	F:5'-GCTGCGAAGTGGAAACCATC-3' R:5'-CCTCCTTCTGCACACATTTGAA-3'	135bp
Bcl2	F:5'-GGTGGGGTCATGTGTGTGG-3' R:5'-CGGTTCAAGTACTCAGTCATCC-3'	89bp
Caspase3	F:5'-CATGGAAGCGAATCAATGGACT-3' R:5'-CTGTACCAGACCGAGATGTCA-3'	139bp

Supplemental Table S-2-2: Mouse Primers of qPCR

Gene	Primers
β -actin	F:5'-GTGACGTTGACATCCGTAAAGA-3' 245bp R:5'-GCCGGACTCATCGTACTCC-3'
AZGP1	F:5'-AGCAAAGGTTTTCCGAGGTTT-3' 222bp R:5'-AGACCCTGTAGTGTCCTTGTAAT-3'
TNF α	F:5'-CAGGCGGTGCCTATGTCTC-3' 89bp R:5'-CGATCACCCCGAAGTTCAGTAG-3'
IL-1 β	F:5'-GAAATGCCACCTTTTGACAGTG-3' 116bp R:5'-TGGATGCTCTCATCAGGACAG-3'
IL-6	F:5'-CTGCAAGAGACTTCCATCCAG-3' 131bp R:5'-AGTGGTATAGACAGGTCTGTTGG-3'
NF- κ B	F:5'-ATGGCAGACGATGATCCCTAC-3' 167bp R:5'-CGGAATCGAAATCCCCTCTGTT-3'
MCP-1	F:5'-TAAAAACCTGGATCGGAACCAA-3' 120bp R:5'-GCATTAGCTTCAGATTTACGGGT-3'
SREBP-1c	F:5'-TGACCCGGCTATTCCGTGA-3' 61bp R:5'-CTGGGCTGAGCAATACAGTTC-3'
LXR	F:5'-GCCTGGGAATGGTTCTCCTC-3' 125bp R:5'-AGATGACCACGATGTAGGCAG-3'
FAS	F:5'-GCGGGTTCGTGAAACTGATAA-3' 61bp R:5'-GCAAAATGGGCCTCCTTGATA-3'
ACC	F:5'-CTCCCGATTCATAATTGGGTCTG-3' 217bp R:5'-TCGACCTTGTTTTACTAGGTGC-3'
SCD-1	F:5'-TTCTTGCGATACACTCTGGTGC-3' 98bp R:5'-CGGGATTGAATGTTCTTGTCGT-3'
FXR	F:5'-GGCAGAATCTGGATTTGGAATCG-3' 101bp R:5'-GCCCAGGTTGGAATAGTAAGACG-3'
PPAR α	F:5'-AACATCGAGTGTCGAATATGTGG-3' 99bp R:5'-CCGAATAGTTCGCCGAAAGAA-3'
FATP	F:5'-CTGGGACTTCCGTGGACCT-3' 91bp R:5'-TCTTGCAGACGATACGCAGAA-3'
CPT-1A	F:5'-TGGCATCATCACTGGTGTGTT-3' 133bp R:5'-GTCTAGGGTCCGATTGATCTTTG-3'
Adiponectin	F:5'-TGTTCTCTTAATCCTGCCCA-3' 104bp R:5'-CCAACCTGCACAAGTTCCTT-3'

Suppl Table S-3:Information of primary antibodies

Antibody	Diluted Concentration	Supplier	Product Code
AZGP1	1:1000(WB), 1:200(IH/IF)	Abcam	ab117275
TNF α	1:100(WB), 1:20(IH/IF)	Abcam	ab1793
IL-1 β	1:200	Santa Cruz	sc-12742
IL-6	1:1000(WB), 1:200(IF)	Abcam	ab6672
NF- κ B p50	1:200(WB), 1:50(IF)	Santa Cruz	sc-8414
LXR	1:1000	Abcam	ab24362
FAS	1:1000	Cell Signaling Technology	#8023
SCD-1	1:1000	Cell Signaling Technology	#2794
FXR	1:1000	Abcam	ab235094
CPT-1A	1:1000	Abcam	ab128568
FATP	1:1000	Abcam	ab81875
PCNA	1:1000	Santa Cruz	sc-25280
Cyclin D1	1:1000	Abcam	ab134175
Bcl2	1:500	Abcam	ab692
Caspase3	1:1000	Cell Signaling Technology	#9662
GAPDH	1:10000	Yeasten	30203ES50