

## **Supplementary Materials**

### **Supplementary Figures**

**Supplementary Figure S1:** The expression of METTL3, METTL14, ALKBH5 and FTO in MSCs cocultured with monocytes.

**Supplementary Figure S2.** Expression of MCP1 in the METTL3, METTL14, ALKBH5, and FTO knockdown MSCs.

**Supplementary Figure S3.** Efficiency of siRNAs and lentivirus in MSCs.

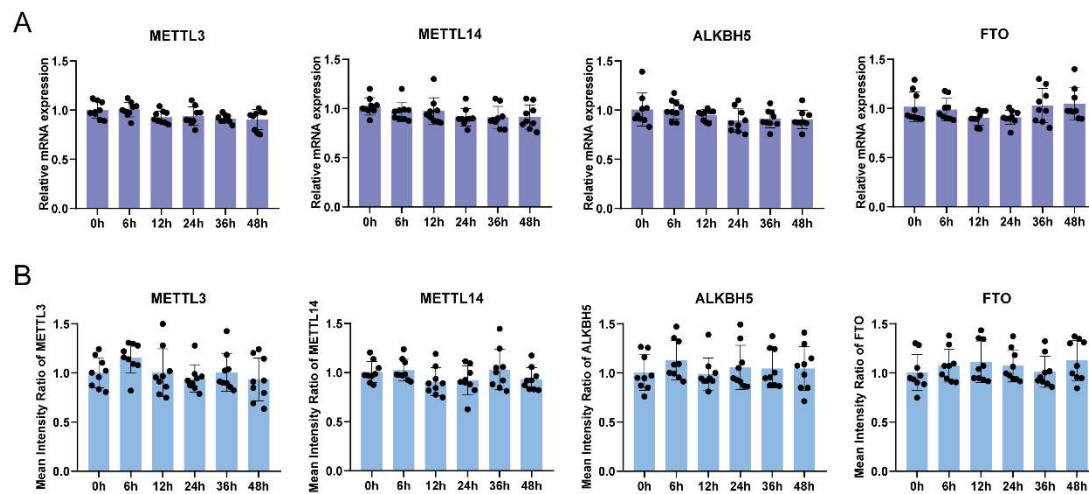
**Supplementary Figure S4.** Unedited Western blots.

### **Supplemental Tables**

**Supplementary Table S1:** Sequence information of siRNAs.

**Supplementary Table S2:** Primers for qPCR.

## Supplementary Figures:



## Supplementary Figure S1. The expression of METTL3, METTL14, ALKBH5 and

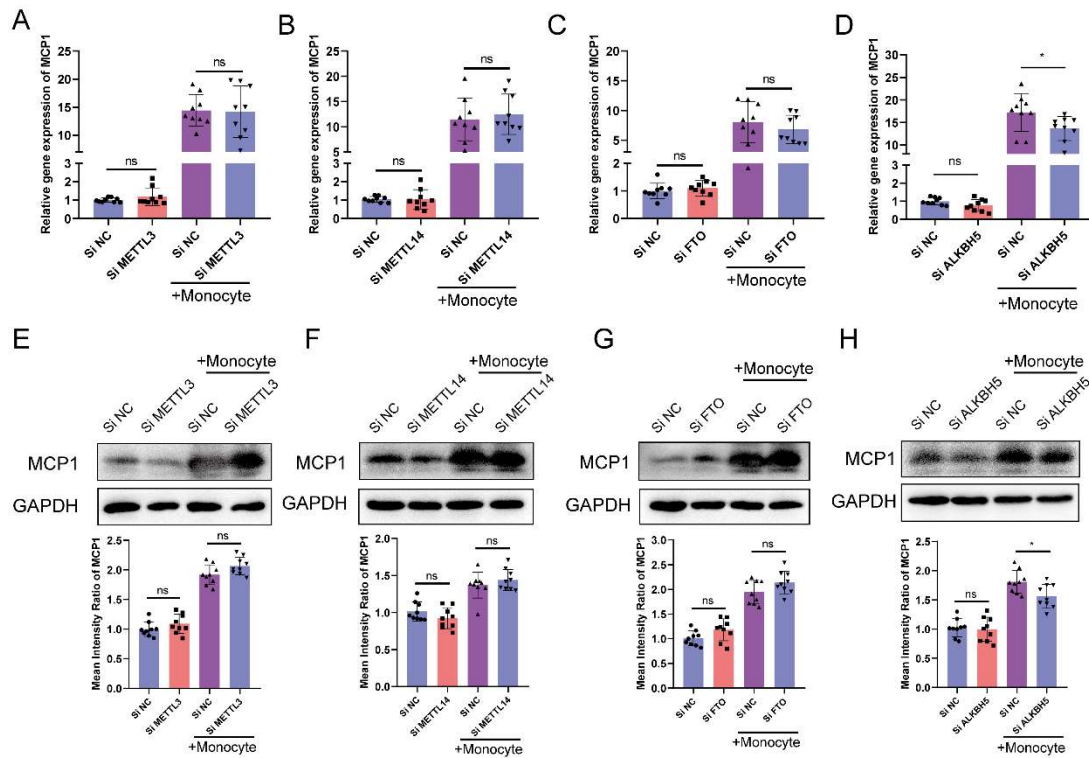
**FTO in MSCs cocultured with monocytes. A.** The mRNA expression of *METTL3*,

*METTL14*, *ALKBH5* and *FTO* in MSCs cultured with monocytes at different time

points (n=9). **B.** The mean fluorescence intensity of METTL3, METTL14, ALKBH5

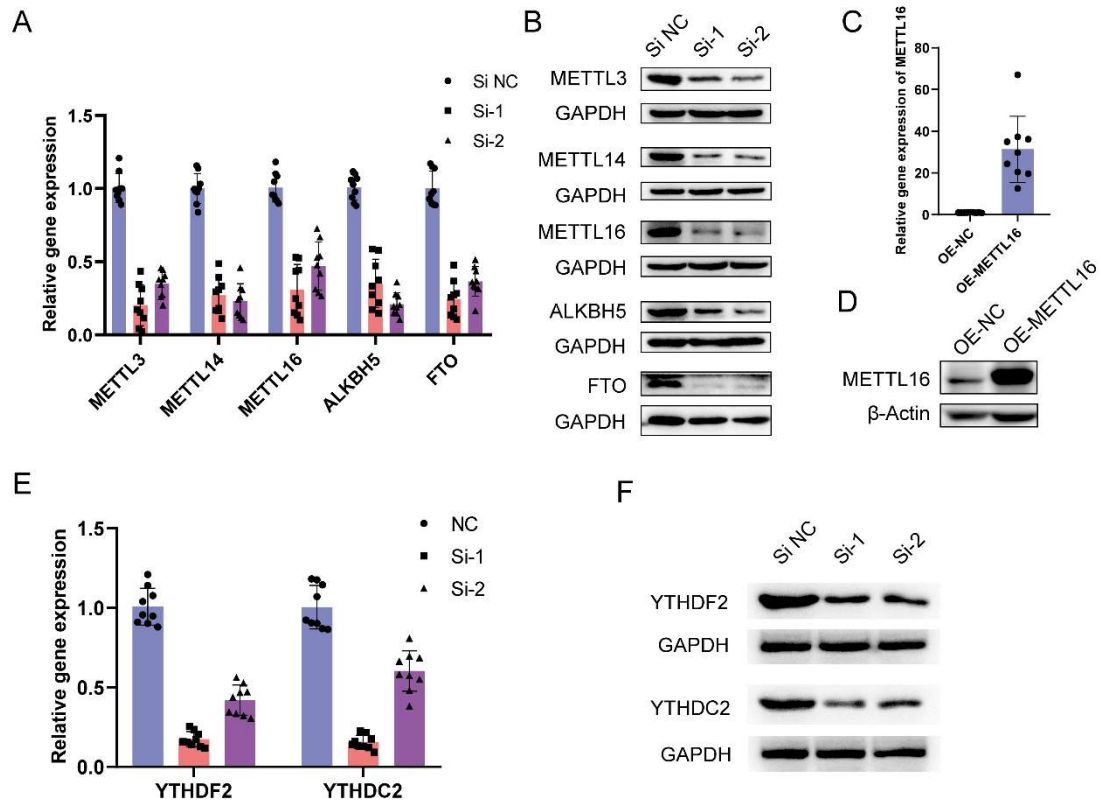
and FTO in MSCs cultured with monocytes at different time points (n=9). Data are

presented as the mean  $\pm$  SD.

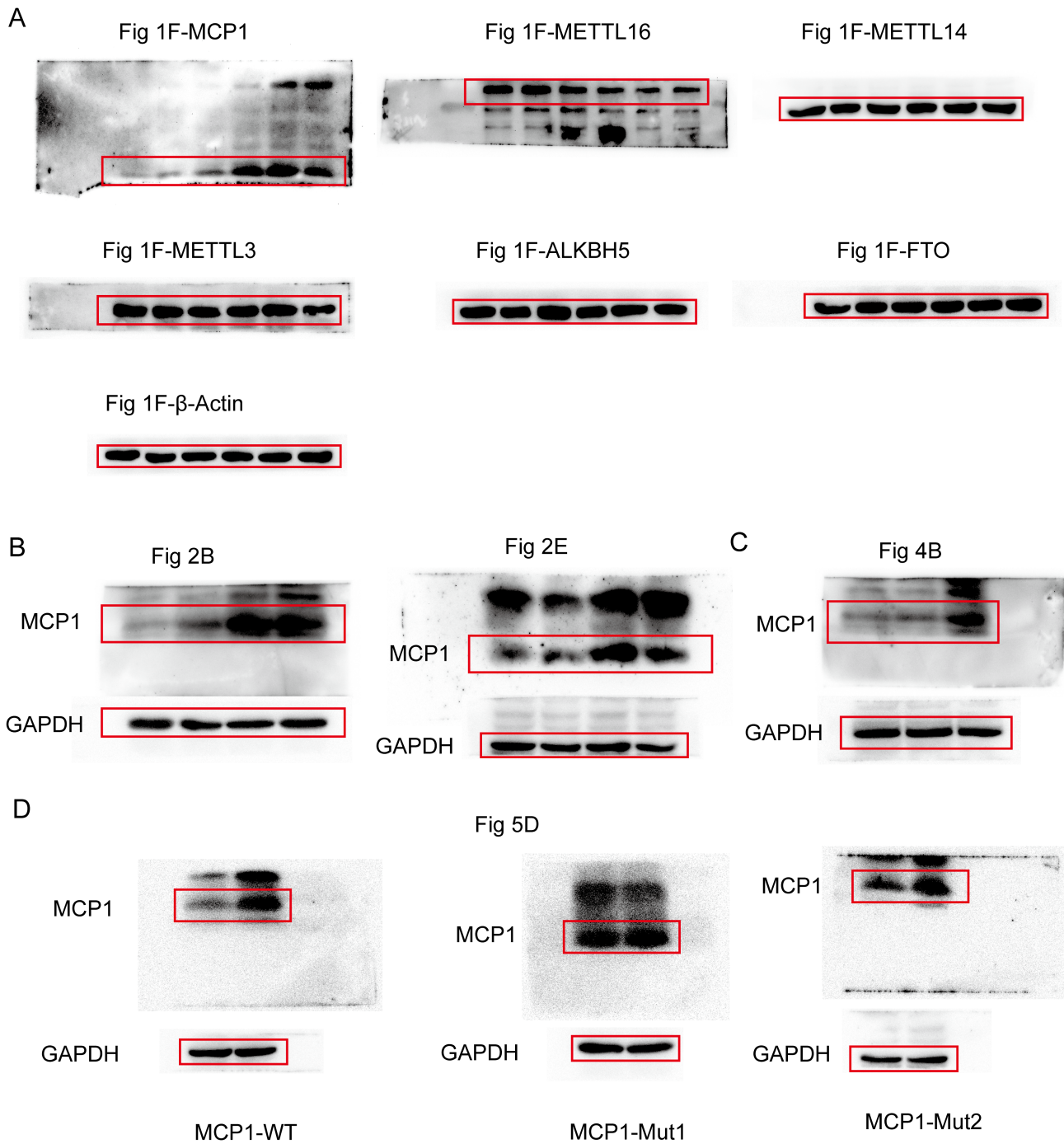


**Supplementary Figure S2. Expression of MCP1 in the METTL3, METTL14, ALKBH5, and FTO knockdown MSCs.** **A.** The mRNA expression of *MCP1* in siNC or siMETTL3 MSCs cultured with or without monocytes (n=9). **B.** The mRNA expression of *MCP1* in siNC or siMETTL14 MSCs cultured with or without monocytes (n=9). **C.** The mRNA expression of *MCP1* in siNC or siFTO MSCs cultured with or without monocytes (n=9). **D.** The mRNA expression of *MCP1* in siNC or siALKBH5 MSCs cultured with or without monocytes (n=9). **E.** Representative blot images and mean fluorescence intensity of MCP1 in siNC or siMETTL3 MSCs cultured with or without monocytes (n=9). **F.** Representative blot images and mean fluorescence intensity of MCP1 in siNC or siMETTL14 MSCs cultured with or without monocytes (n=9). **G.** Representative blot images and mean fluorescence intensity of MCP1 in siNC or siFTO MSCs cultured with or without monocytes (n=9). **H.** Representative blot images and mean fluorescence intensity of MCP1 in siNC or siALKBH5 MSCs

cultured with or without monocytes (n=9). Data are presented as the mean  $\pm$  SD. ns indicates no statistical significance, and \* indicates  $p < 0.05$ .



**Supplementary Figure S3. Efficiency of siRNAs and lentivirus in MSCs.** **A.** The mRNA expression of METTL3, METTL14, METTL16, ALKBH5 and FTO in the corresponding siRNA-treated MSCs (n=9). **B.** Representative blot images of METTL3, METTL14, METTL16, ALKBH5 and FTO in the corresponding siRNA-treated MSCs (n=9). **C.** The mRNA expression of *METTL16* in the lentivirus METTL16-treated MSCs (n=9). **D.** Representative blot images of METTL16 in the lentivirus METTL16-treated MSCs (n=9). **E.** The mRNA expression of *YTHDF2* and *YTHDC2* in the corresponding siRNA-treated MSCs (n=9). **F.** Representative blot images of *YTHDF2* and *YTHDC2* in the corresponding siRNA-treated MSCs (n=9). Data are presented as the mean  $\pm$  SD.



**Supplementary Figure S4. Unedited Western blots.**

**Supplementary Tables:****Supplemental Table S1** Sequence information of siRNAs

	Sense (5'-3')	Antisense (5'-3')
Si-NC	UUCUCCGAACGUGUCACGUTT	ACGUGACACGUUCGGAGAATT
METTL3-si-1	GGGCCCAAGUGCAAGAAUUTT	AAUUCUUGCACUUGGGCCCTT
METTL3-si-2	CCUGCAAGUAUGUUCACUATT	UAGUGAACAUACUUGCAGGTT
METTL14-si-1	GGAUGAAGGAGAGACAGAUTT	AUCUGUCUCUCCUUCAUCCTT
METTL14-si-2	CCUGGGAAGACUAAGACUUTT	AAGUCUUAGUCUUCCCAGGTT
METTL16-si-1	CCAUGACAGUCUACAACUUTT	AAGUUGUAGACUGUCAUGGTT
METTL16-si-2	CCUUGAGACUCAACUAUAUTT	AUAUAGUUGAGUCUCAAGGTT
FTO-si-1	CAGGAACCUUGGAUUUAUUTT	AUAUAAUCCAAGGUUCCUGTT
FTO-si-2	GUGGCAGUGUACAGUUUAUATT	UAUAACUGUACACUGCCACTT
ALKBH5-si-1	GACUGUGCUCAGUGGAUAUTT	AUAUCCACUGAGCACAGUCTT
ALKBH5-si-2	GCUUCAGCUCUGAGAACUATT	UAGUUCUCAGAGCUGAAGCTT
YTHDF2-si-1	GGUGAAGCUGCUUGGUCUATT	UAGACCAAGCAGCUUCACCTT
YTHDF2-si-2	GCACAGAAGUUGCAAGCAATT	UUGCUUGCAACUUCUGUGCTT
YTHDC2-si-1	GCGACUCAACAAUGGCAUATT	UAUGCCAUUGUUGAGUCGCTT
YTHDC2-si-2	GGAUUUGAUGCAUCUUTT	AAGAUGCAUGAUCAAAUCCTT

**Supplemental Table S2 Primers for qPCR**

Gene	Forward primer (5'-3')	Reverse primer (5'-3')
MCP1	CAGCCAGATGCAATCAATGCC	TGGAATCCTGAACCCACTTCT
METTL3	ATTTTCCGGTTAGCCTTCGGG	TGGATTCCGTAGATCCAAGTGC
METTL14	GAACACAGAGCTTAAATCCCCA	TGTCAGCTAAACCTACATCCCTG
METTL16	ACTTTTGCATGTGCAACCCTC	ACGTTACTTTGGGAACCCCTT
FTO	GAATTCTATCAGCAGTGGCAGC	GGATGCGAGATAACCGGAGTG
ALKBH5	CGGCGAAGGCTACACTTACG	CCACCAGCTTTTGGATCACCA
Pre-MCP1	GCTTCCAGAGACGGTGACTC	CCAGATGATCAGCACCAGGG
YTHDF2	GAGACCAAAGGTCAAGGAAACA	GCAGTATATGCATTATTGGGCCTTG
YTHDC2	CGATACGGGGACCAGAGAGA	GGTCATCATTGCATGAGCTGTT
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG