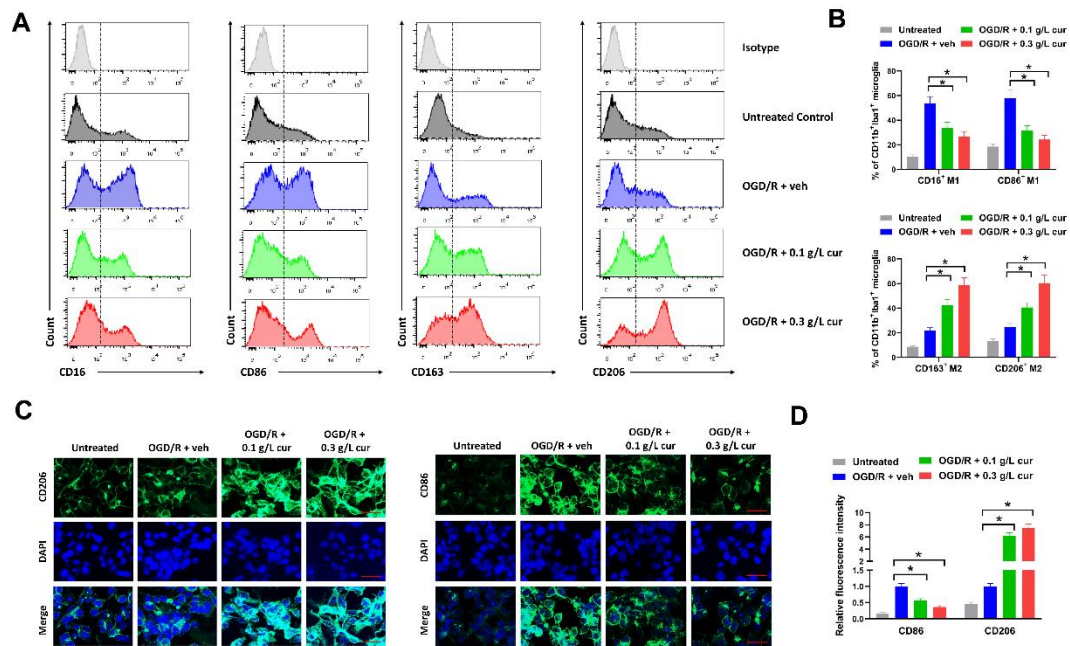
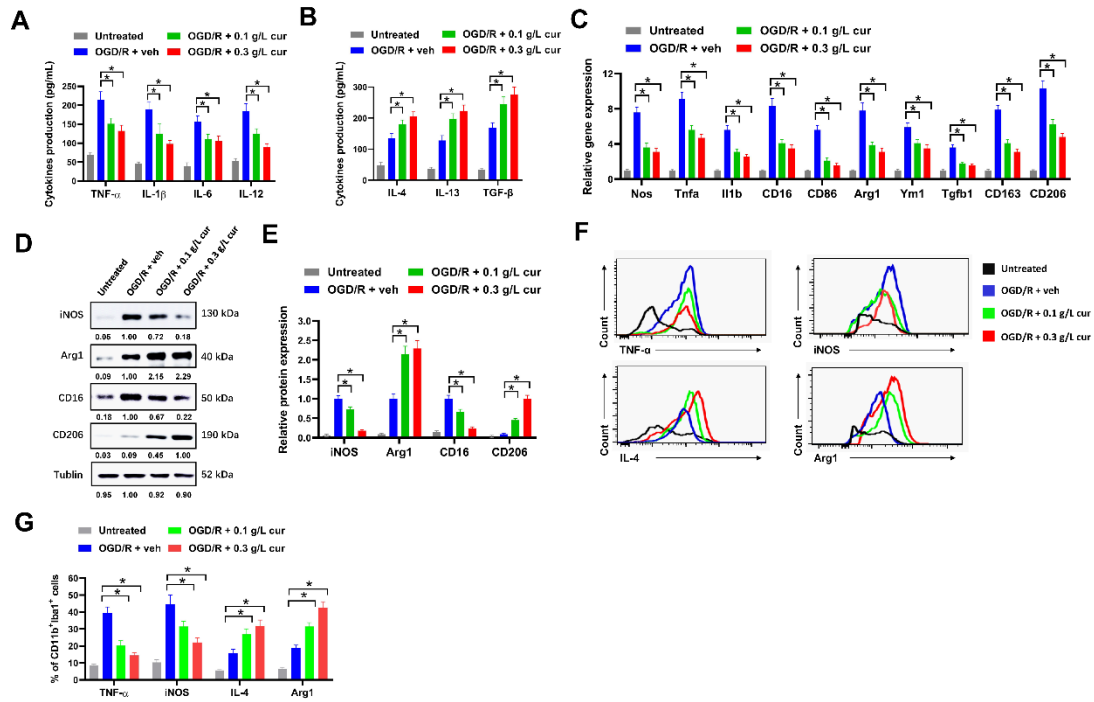


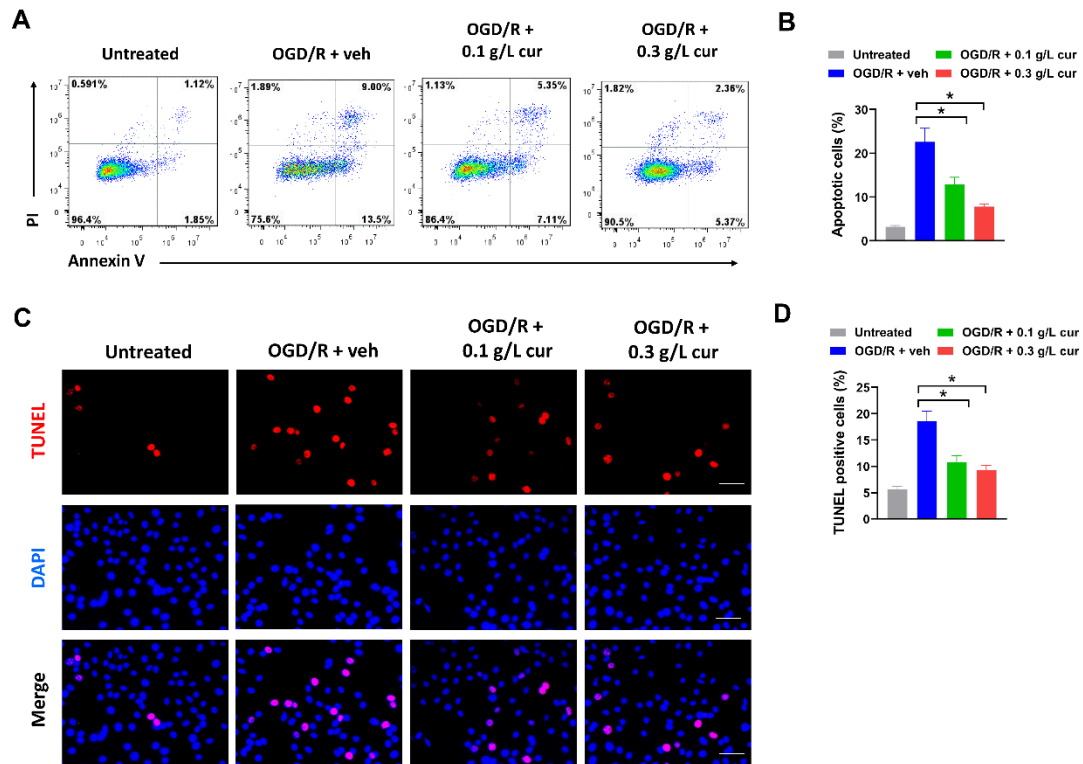
## Supplementary data



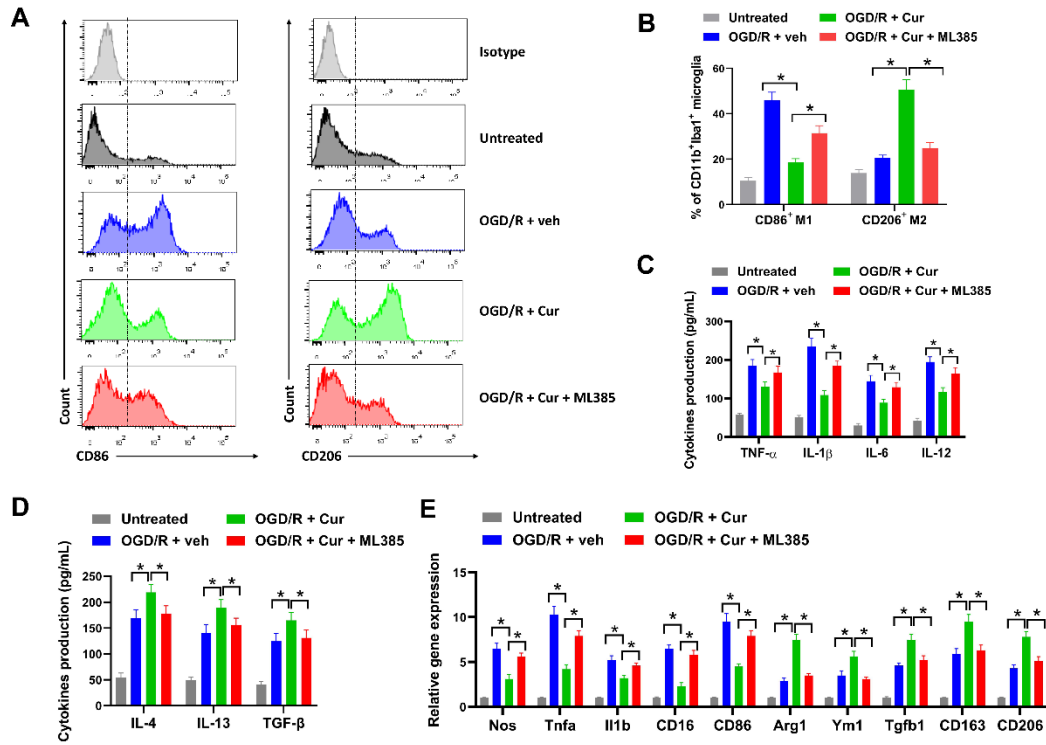
Supplementary Figure 1. Curcumol induces anti-inflammatory microglial polarization *in vitro* post OGD/R. Primary microglia from healthy mice were treated with 0.1g/L curcumol (OGD/R + 0.1g/L cur group), 0.3g/L curcumol (OGD/R + 0.3g/L cur group) and equal volume of PBS (OGD/R + veh group and Sham group) for 72h after OGD/R. A-B, representative histogram (A) and percentages of CD16<sup>+</sup>, CD86<sup>+</sup>, CD163<sup>+</sup> and CD206<sup>+</sup> cells (B) in CD11b<sup>+</sup>Iba1<sup>+</sup> microglia of primary microglia after OGD/R were evaluated by flow cytometry and shown. C-D, the expression levels of CD86 and CD206 were evaluated by immunofluorescence (C). Relative fluorescence intensity was shown (D). Scale bar = 10  $\mu$ m. \* $P$  < 0.05.



Supplementary Figure 2. Curcumin promotes M1 to M2 microglial polarization *in vitro* post OGD/R. A-B, the levels of proinflammatory cytokines TNF- $\alpha$ , IL-1 $\beta$ , IL-6 and IL-12 (A) and anti-inflammatory cytokines IL-4, IL-13 and TGF- $\beta$  (B) in primary microglia after OGD/R were evaluated by ELISA assay. C, the mRNA expression of proinflammatory marker genes (Nos, Tnfa, Il1b, CD16 and CD86) and anti-inflammatory marker genes (Arg1, Ym1, Tgfb1, CD163 and CD206) in primary microglia after OGD/R was evaluated by RT-qPCR. D-E, the protein levels of indicated genes in primary microglia after OGD/R were evaluated by western blot (D). Relative protein expression was shown (E). F-G, the expression levels of M1 phenotype markers (TNF- $\alpha$  and iNOS) and M2 phenotype markers (IL-4 and Arg1) were detected by flow cytometry. Representative histogram (F) and percentages of TNF- $\alpha$ <sup>+</sup>, iNOS<sup>+</sup>, IL-4<sup>+</sup> and Arg1<sup>+</sup> cells were shown (G). \* $P < 0.05$ .



Supplementary Figure 3. Curcumol suppresses microglia-induced neuronal apoptosis post OGD/R. Primary neurons were co-cultured with post-OGD/R primary microglia in transwell chamber for 72 h. Apoptotic cells were evaluated by flow cytometry (A-B) or TUNEL staining (C-D). \* $P < 0.05$ .



Supplementary Figure 4. ML385 treatment abolishes the effect of curcumin on microglial polarization in vitro. Post-OGD/R primary microglia were treated with 0.3g/L curcumin (cur), 1  $\mu$ M ML385 or equal volume of DMSO (veh) for 72 h as indicated. A-B, representative histogram (A) and percentages of CD86<sup>+</sup> and CD206<sup>+</sup> cells (B) in CD11b<sup>+</sup>Iba1<sup>+</sup> microglia were shown. C-D, the levels of proinflammatory cytokines TNF- $\alpha$ , IL-1 $\beta$ , IL-6 and IL-12 (C) and anti-inflammatory cytokines IL-4, IL-13 and TGF- $\beta$  (D) were evaluated by ELISA assay. E, the mRNA expression of proinflammatory marker genes (Nos, Tnfa, Il1b, CD16 and CD86) and anti-inflammatory marker genes (Arg1, Ym1, Tgfb1, CD163 and CD206) was evaluated by RT-qPCR. \* $P$  < 0.05.

Original western blot gels

Fig 3F

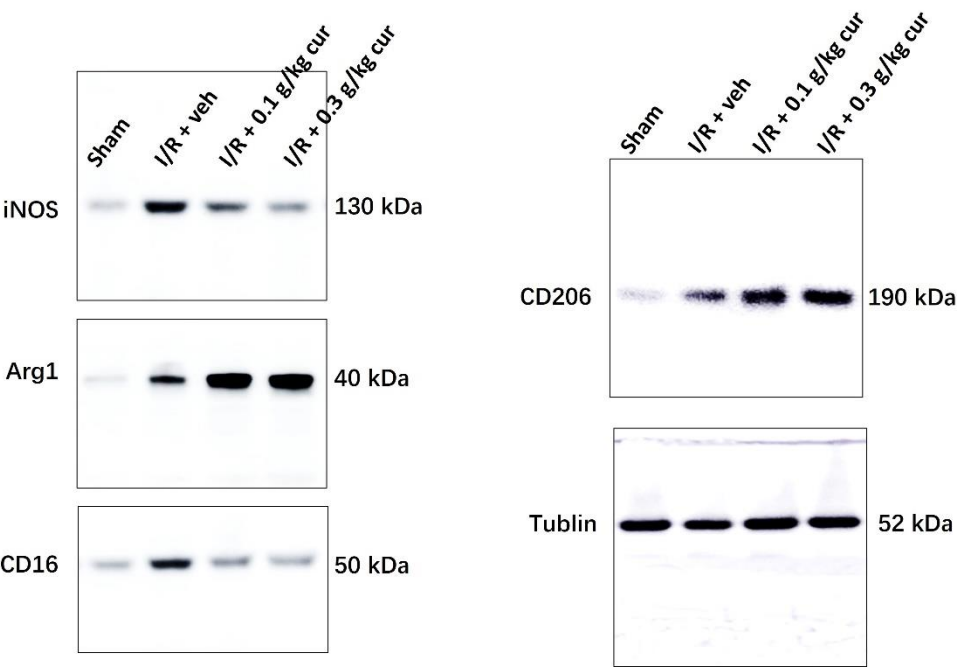


Fig 6I

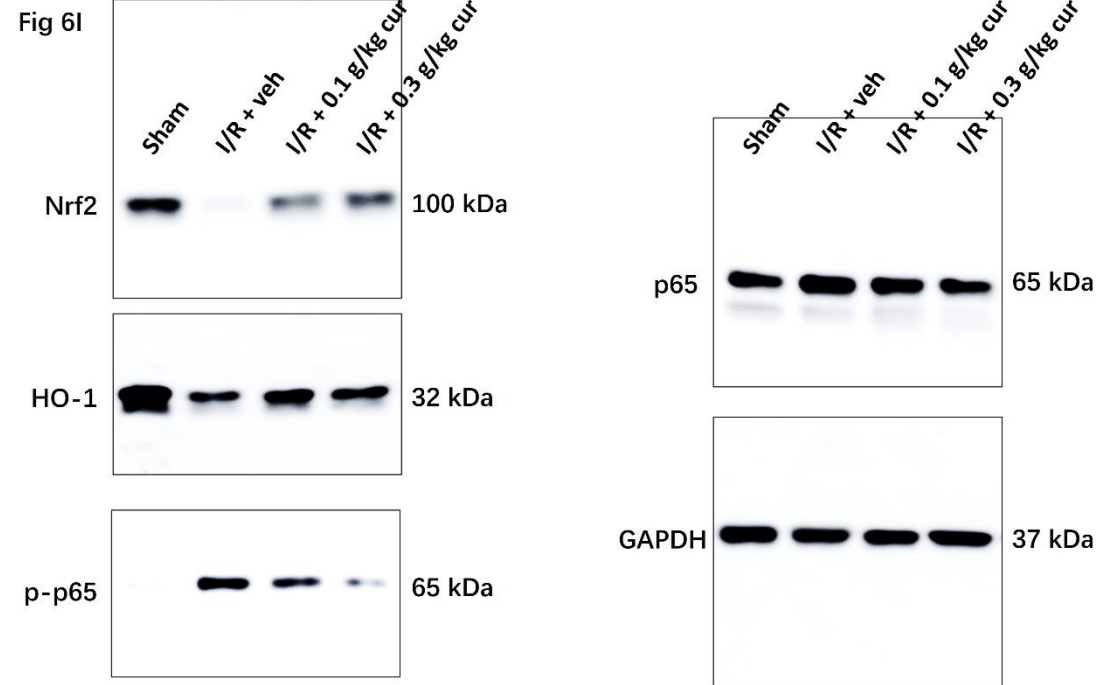


Fig 6K

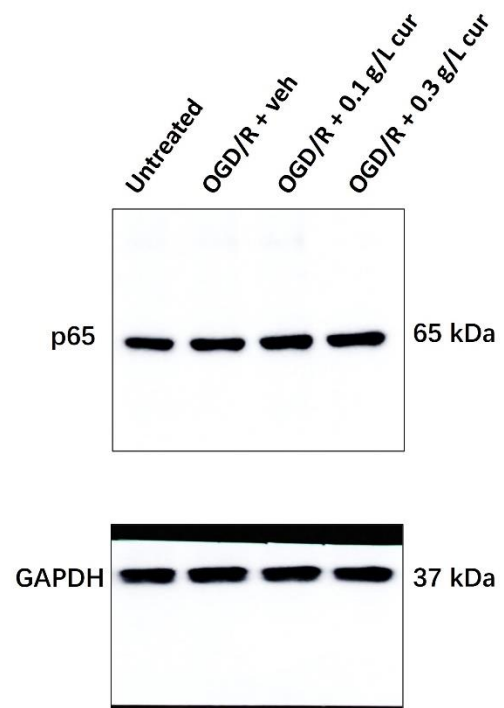
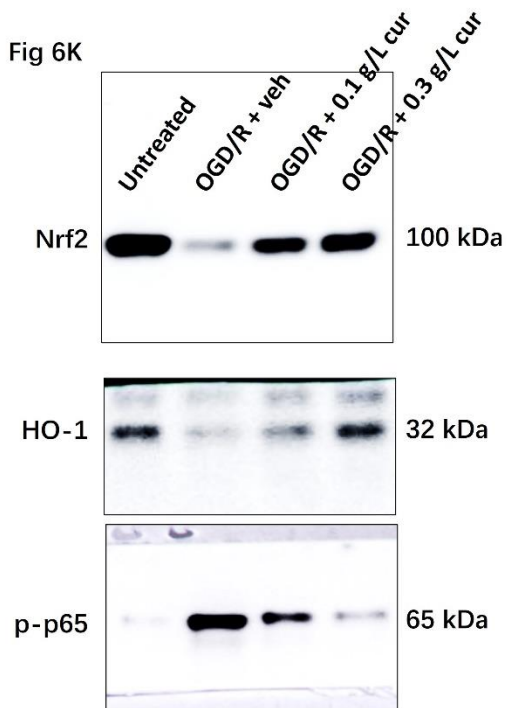


Figure 7A

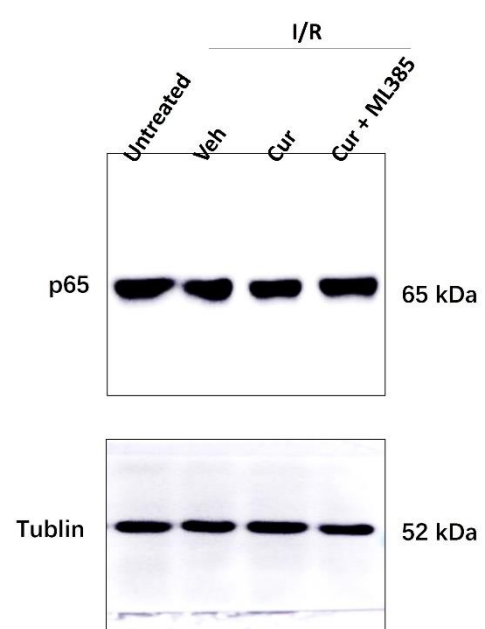
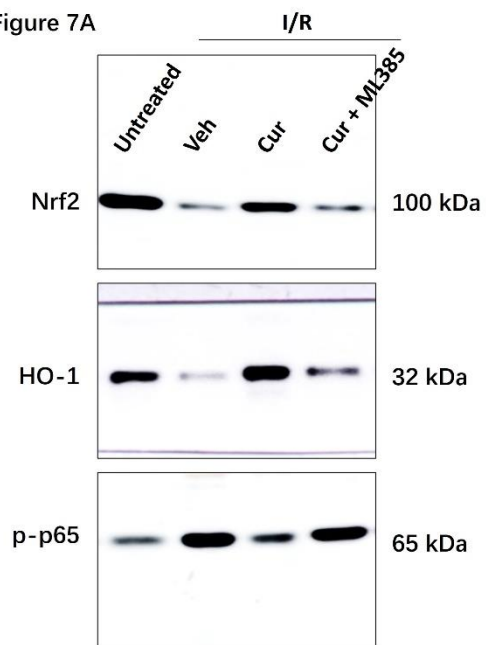


Fig 7H

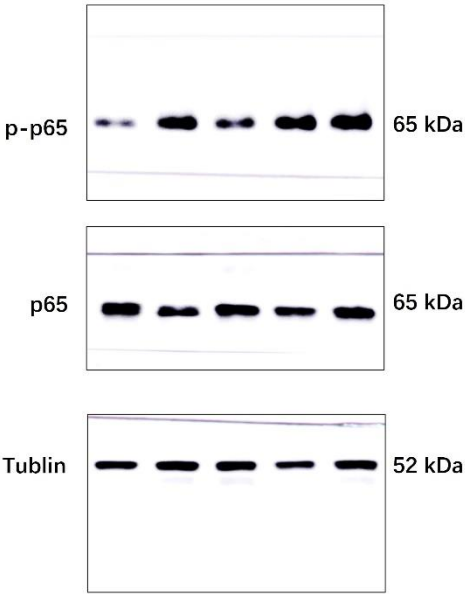
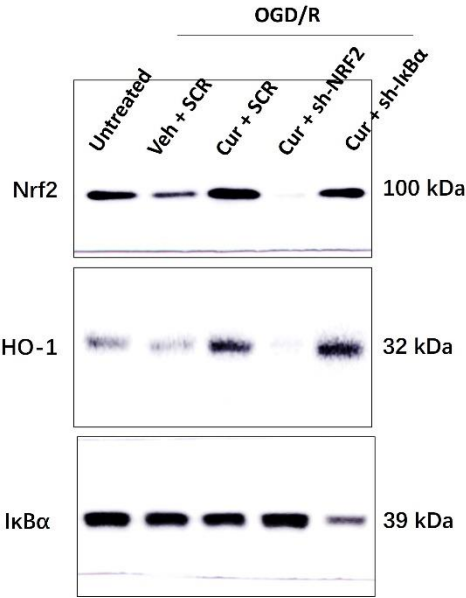


Fig S2D

