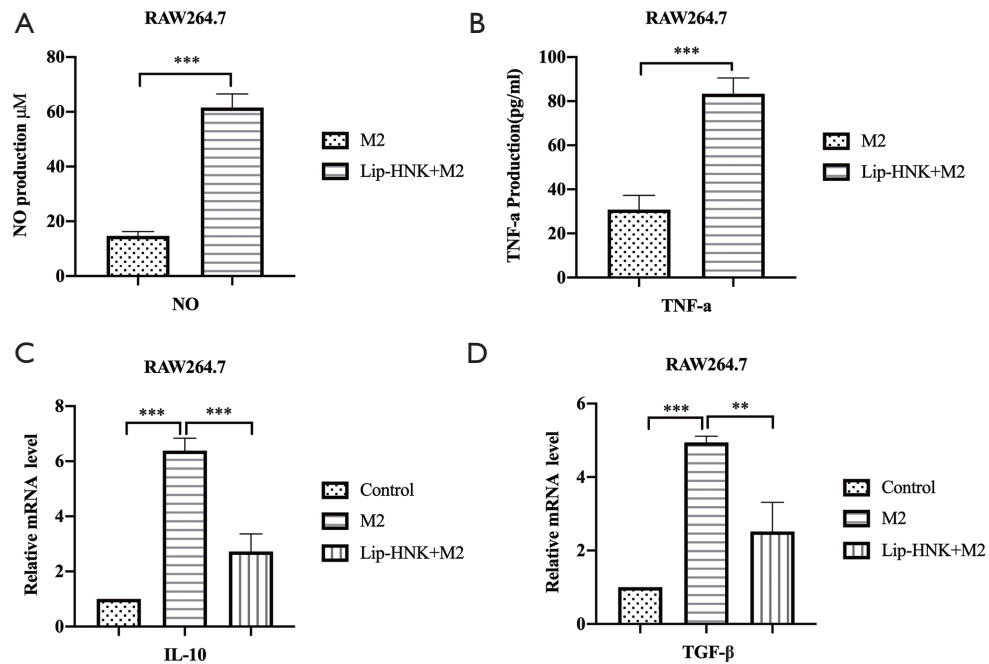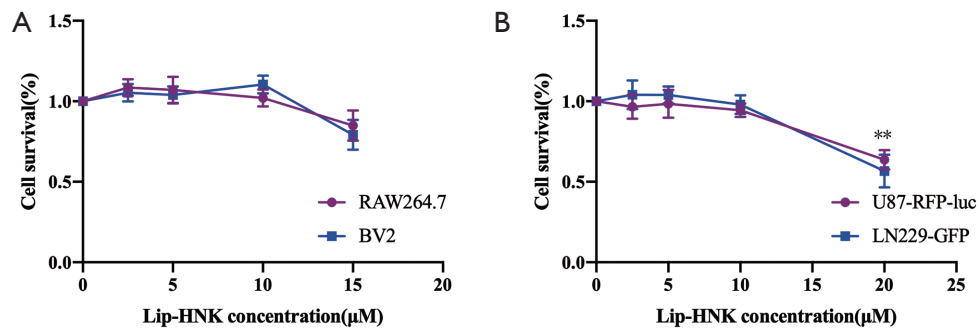**Figure S1** The effect of liposomal honokiol (Lip-HNK) on lipopolysaccharide (LPS) + interferon γ (IFN-γ)-mediated macrophage marker expression. The mRNA levels of tumor necrosis factor α (TNF-α) were detected by real-time reverse transcription polymerase chain reaction (RT-PCR) in RAW264.7 (A) and BV2 cells (B). *, P<0.05; ***, P<0.001.


Figure S2 The levels of M1 and M2 related markers in RAW264.7 cells after induced with interleukin (IL)-4 and liposomal honokiol (Lip-HNK) treatment. The produced levels of nitric oxide (NO) (A), tumor necrosis factor α (TNF-α) (B), and the relative mRNA expression of IL-10 (C) and transforming growth factor β (TGF-β) (D) were detected by real-time reverse transcription polymerase chain reaction (RT-PCR) in RAW264.7 cells. **, P<0.01; ***, P<0.001.
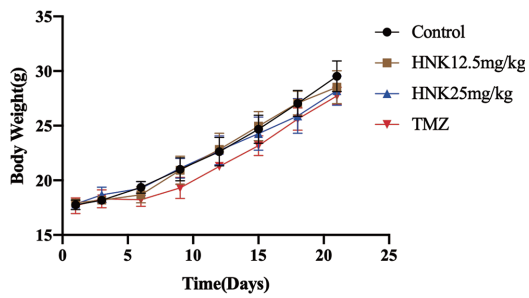
Figure S3 The effect of liposomal honokiol (Lip-HNK) on the proliferation of tumor, and macrophage cells. (A) Macrophage cells were treated with different concentration of Lip-HNK for 48 h; (B) U87 and LN229 tumor cell lines were treated with different concentration of Lip-HNK for 48 h. **, P<0.01.

U87-RFP-Luc cells
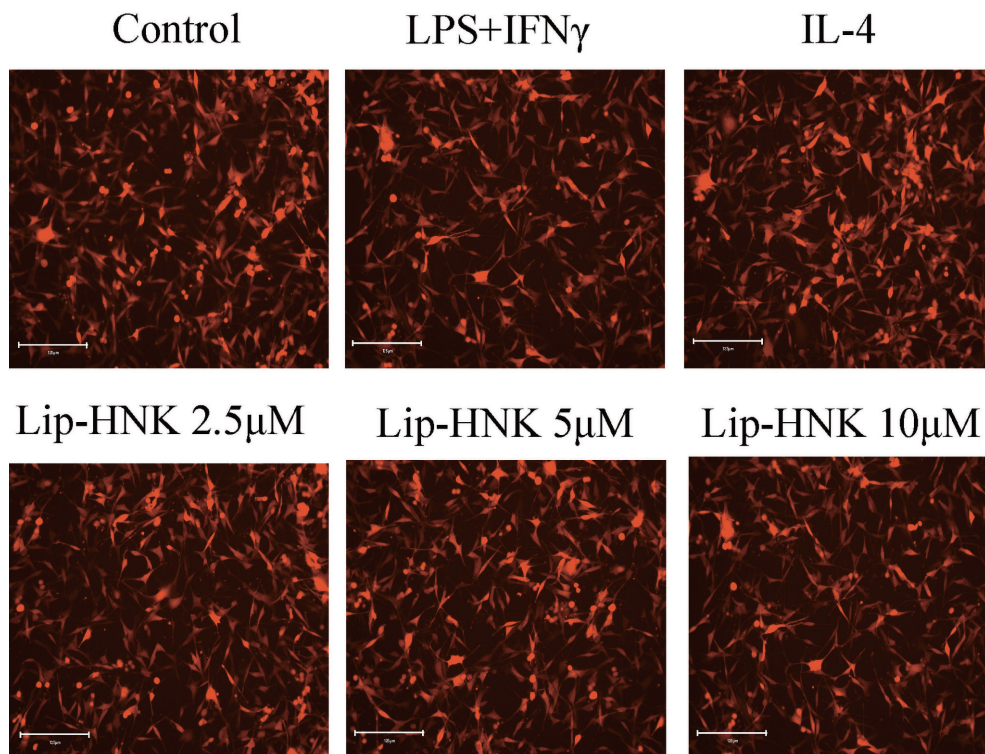
Figure S4 The effect of liposomal honokiol (Lip-HNK) and M1/M2 inducer on the proliferation of U87-RFP-Luc tumor cells. U87-RFP-Luc glioma cells were treated with different concentration of Lip-HNK or interferon γ (IFN-γ)/lipopolysaccharide (LPS) and interleukin 4 (IL-4). The morphological feature of tumor cells was examined under fluorescence microscopy.

Figure S5 Effect of liposomal honokiol (Lip-HNK) on glioblastoma progression in G422 xenograft model. Body weight in individual mice were detected. TMZ, temozolomide.
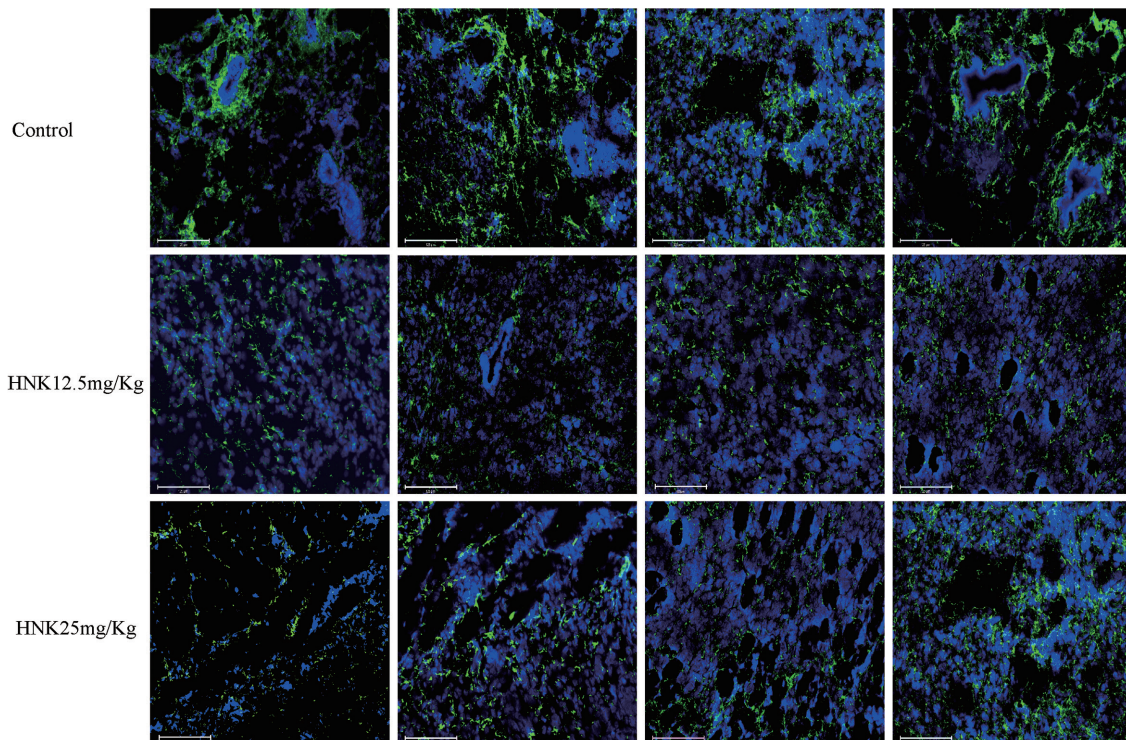
Figure S6 The expression of CD31 in liposomal honokiol (Lip-HNK) group and control group. Green fluorescence was used to detect the expression of CD31 in tumor tissue of G422 mice, blue fluorescence represents 4',6-diamidino-2-phenylindole (DAPI).
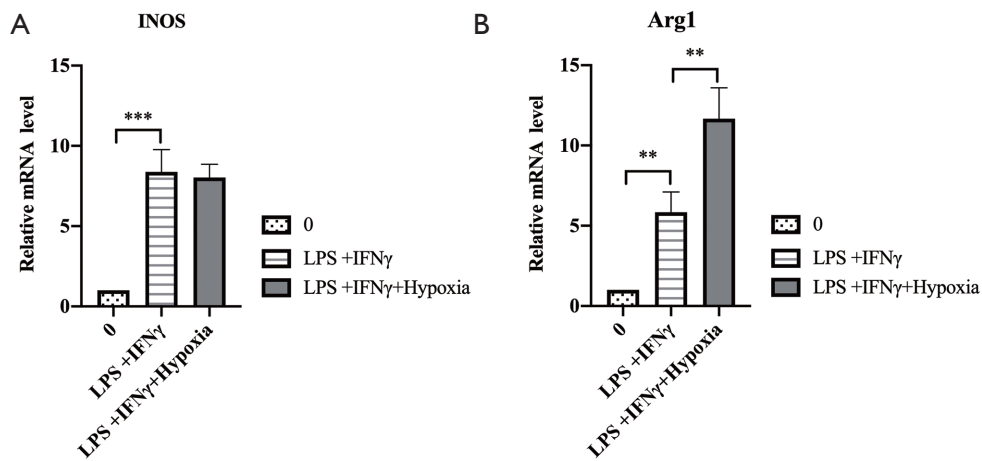
Figure S7 The expression of macrophage related markers in lipopolysaccharide (LPS) + interferon γ (IFN-γ) (A) and interleukin 4 (IL-4) (B) group under hypoxia. **, P<0.01; ***, P<0.001.

Table S1 The primer sequences used in the real time reverse transcription polymerase chain reaction (RT-PCR) analysis

Gene	Strands	Sequence
Inducible nitric oxide synthase (*iNOS*)	Forward	5'-CTC AGC CCA ACA ATA CAA G-3'
	Reverse	5'-CTA CAG TTC CGA GCG TCA-3'
Arginase 1 (*Arg1*)	Forward	5'- ATCAACACTCCCCTGACAACC-3'
	Reverse	5'- CGCAAGCCAATGTACACGAT-3'
GAPDH	Forward	5'-GGT TGT CTC CTG CGA CTT CA-3'
	Reverse	5'-TGG TCC AGG GTT TCT TAC TCC-3'
Tumor necrosis factor alpha (*TNF-a*)	Forward	5'-ATGAGCACAGAAAGCATGATC-3'
	Reverse	5'-TACAGGCTTGTCACTCGAATT-3'
Interleukin-10 (*IL-10*)	Forward	5'-CAGAGCCACATGCTCCTAGA-3'
	Reverse	5'-TGTCCAGCTGGTCCTTTGTT-3'
TGF-β1 (Transforming growth factor beta1)	Forward	5'-GCCACTGCCCATCGTCTACT-3'
	Reverse	5'-CACTTGCAGGAGCGCACAAT-3'