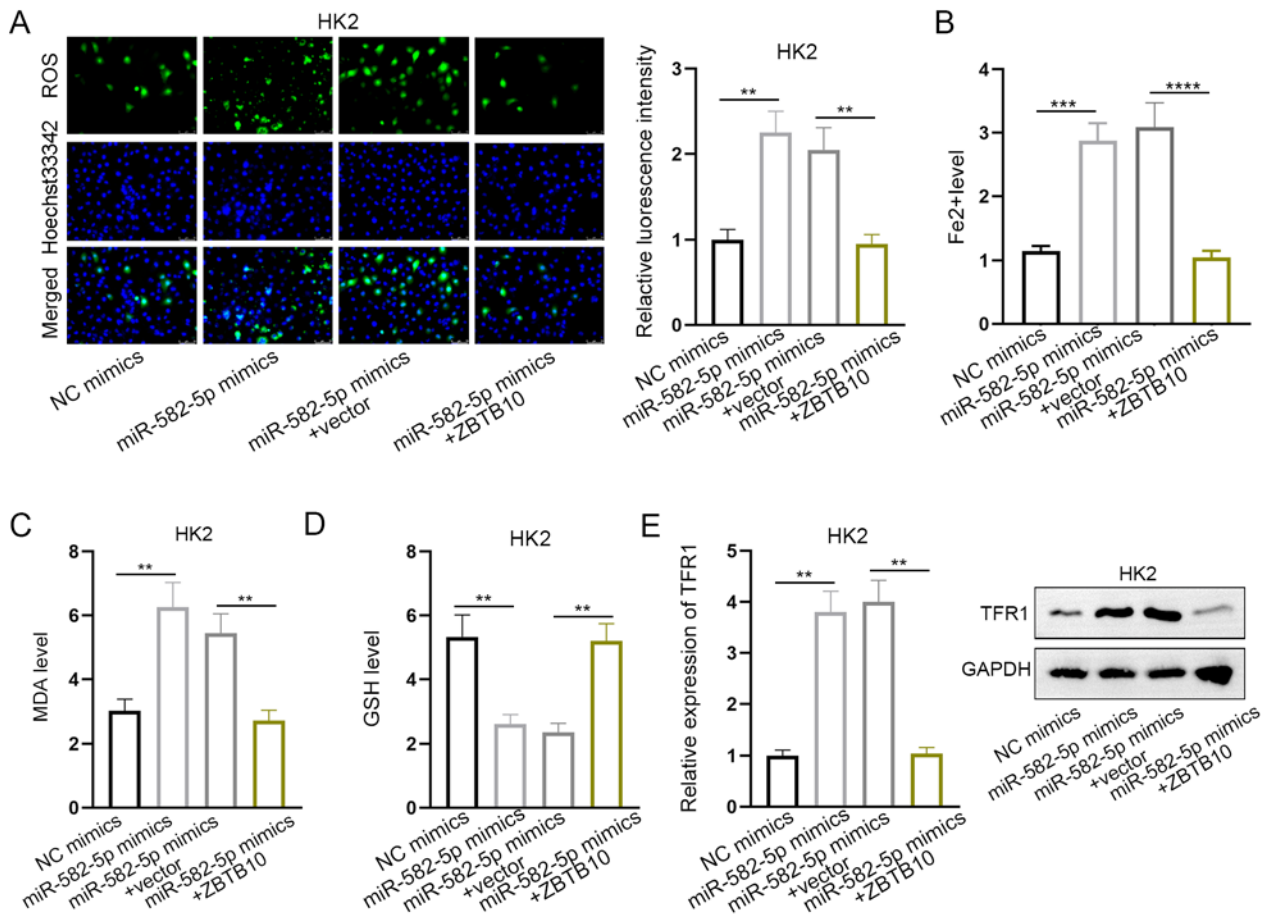


Supplementary Figure S1. Induction of M1-polarized macrophages, extraction of exosomes, and treatment of HK2 cells with these exosomes. **A** – RT-qPCR analysis of M1 polarization markers in THP-1 and RAW264.7 cells induced by LPS. **B** – Western blot analysis of M1-polarized macrophage exosome marker proteins. **C** – Schematic diagram illustrating treatment of HK2 cells with exosome models. **D** – PKH26 staining to trace exosomes



Supplementary Figure S2. MiR-582-5p/ZBTB10 promotes ferroptosis in HK2 cells. Effect of miR-582-5p overexpression or simultaneous overexpression of miR-582-5p and ZBTB10 on HK2 cells. Groups: NC mimics, miR-582-5p mimics, miR-582-5p mimics + vector, miR-582-5p mimics + ZBTB10. **A** – Measurement of ROS levels in HK2 cells in different groups. **B** – Measurement of Fe²⁺ levels in HK2 cells in different groups. **C** – Measurement of MDA levels in HK2 cells in different groups. **D** – Measurement of GSH levels in HK2 cells in different groups. **E** – RT-qPCR and Western blot analysis of the ferroptosis-promoting gene TFR1 in HK2 cells in different groups