

Supplementary Materials: Proteome-Wide Analysis Reveals TFEB Targets for Establishment of a Prognostic Signature to Predict Clinical Outcomes of Colorectal Cancer

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Supplementary materials and methods for qRT-PCR analysis

Total RNA was extracted using the HiPure Total RNA Mini Kit (Magen Biotechnology, Guangzhou, china) according to the manufacturer's protocol. cDNA was generated using the Hifai II 1st Strand cDNA Synthesis SuperMix (Yeast Biotechnology, Shanghai, China). qPCR was performed using a SYBR green mixture (Yeast Biotechnology) and Applied Biosystems StepOne Real-Time PCR System (Thermo Fisher Scientific, Waltham, MA, USA). Primers: SMPD1 forward, 5'-GCTGGCTCTATGAAGCGATGGC-3' and reverse, 5'-AGAGCCAGAAGTTCTCACGGGA-3'. NDRG1 forward, 5'-AGCTCGTCAGTTCACCATCC-3' and reverse, 5'-GAGTACGCGGGGCTACAAAG-3'. LAMP2 forward, 5'-GGCAATGATACTTGTCTGCTGGC-3' and reverse, 5'-GTAGAGCAGTGTGAGAACGGCA-3'. Actin forward, 5'-ACGTGGACATCCGCAAAG-3' and reverse, 5'-GACTCGTCATACTCCTGCTTG-3'.

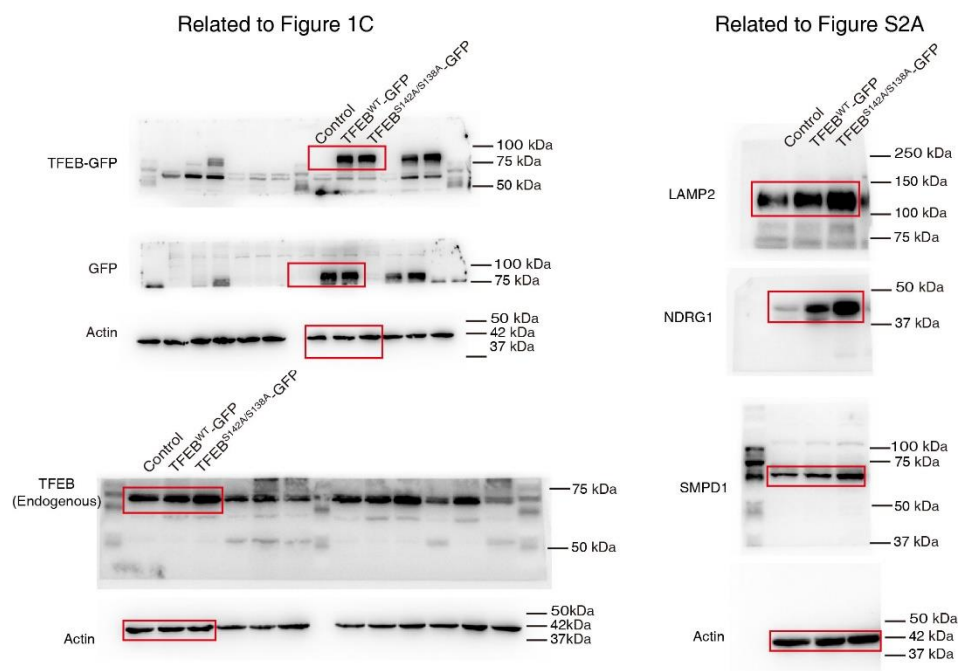


Figure S1. Uncropped Western Blots for Figure 1 and Figure S2A.

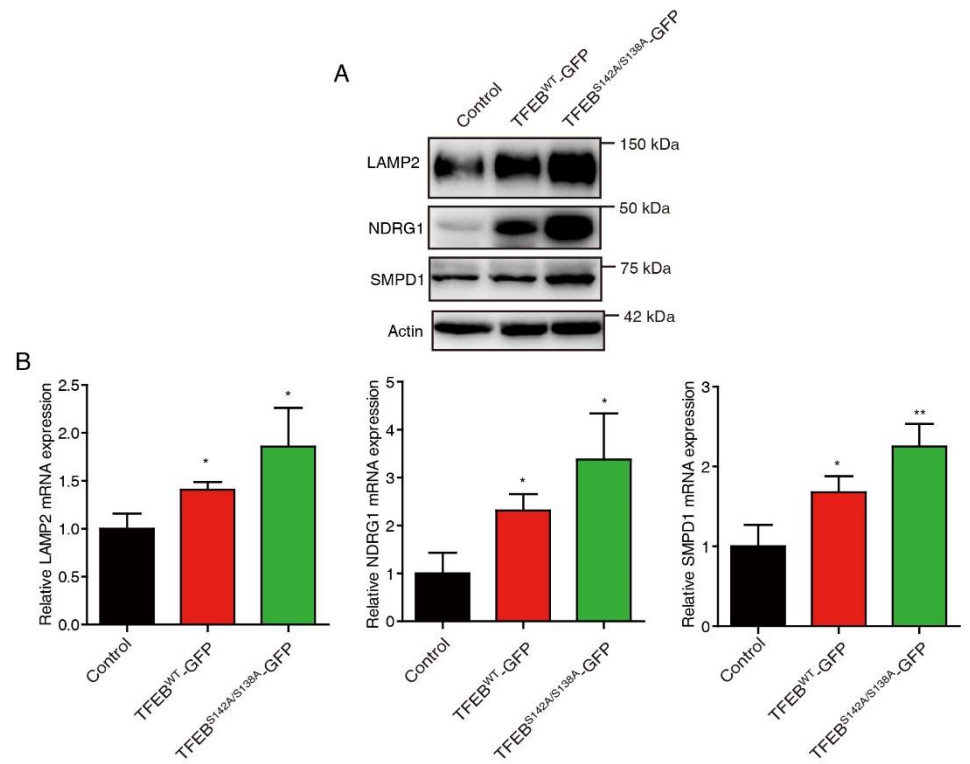


Figure S2. Verification of randomly selected DEPs. (A) Western Blots of LAMP2, NDRG1 and SMPD1 in the indicated DLD1 cells. Actin was used as loading control. Uncropped immunoblots are provided in the Figure S1. (B) qRT-PCR analysis of mRNA levels of LAMP2, NDRG1 and SMPD1.

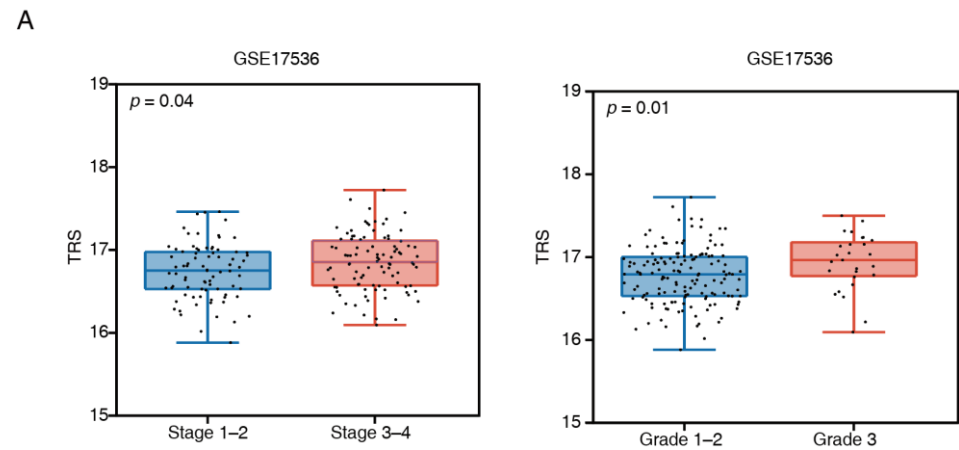


Figure S3. Distribution of TRS in stage and grade.

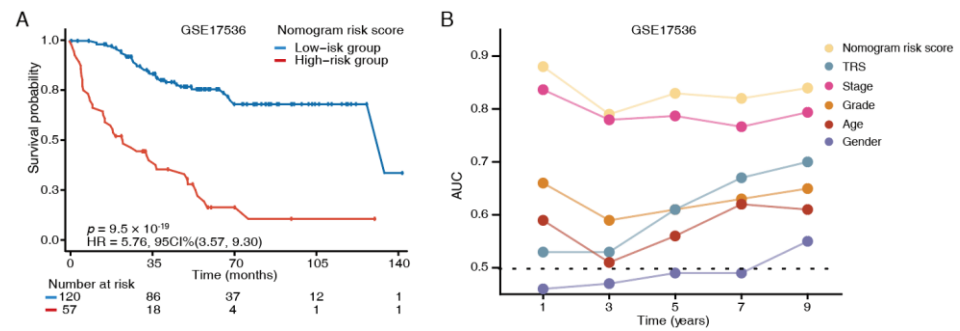


Figure S4 The external validation of the nomogram (A). Kaplan–Meier curves of OS between high-risk and low-risk patients in the GSE17538 cohort (B) tROC analysis assessed the accuracy of nomogram.

Table S1. The quantifiable protein list in TFEB^{WT}, TFEB^{S142A/S138A} and control datasets.

Table S2. The differential expressed proteins in TFE^{BS142A/S138A} vs TFEB^{WT} and TFEB^{WT} vs control datasets.

Table S3. The protein list of TFEB targets (Fold change: TFEB^{S142A/S138A} vs TFEB^{WT} > TFEB^{WT} vs control > 1.2; $p < 0.05$).

Table S1–S3. are provided separately, attached as Excel files