Supplementary Information (Original photos used for Figure 2, 5, and 6)

Thioredoxin interacting protein protects mice from fasting induced liver steatosis by activating ER stress and its

downstream signaling pathways

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Supplementary Figure S1
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Original photos used for Figure 2b. Western blotting of TXNIP and β -actin are shown. The areas indicated by the boxes in photos are used in Figure 2b. The MagicMark XP (Thermofisher) was used as a M.W. marker. TXNIP, thioredoxin-interacting protein.





LC3

β-actin

Original photos used for Figure 5c. Western blotting of LC-3 and β -actin are shown. The areas indicated by the boxes in photos are used in Figure 5d. The MagicMark XP (Thermofisher) was used as a M.W. marker. LC3, microtubule-associated protein light chain 3.



Original photos used for Figure 5e. Western blotting of Pink1, Parkin, and β-actin are shown. The areas indicated by the boxes in photos are used in Figure 5e. The MagicMark XP (Thermofisher) was used as a M.W. marker. PINK1, PTEN induced kinase 1



Atg5





Original photos used for Figure 5f. Western blotting of Atg5, Atg14, Lamp1, Lamp2, Beclin and β -actin are shown. The areas indicated by the boxes in photos are used in Figure 5f. The MagicMark XP (Thermofisher) was used as a M.W. marker. Atg5, autophagy protein 5; Atg14, autophagy-related protein 14; Lamp1, lysosomal-associated membrane protein 1;Lamp2, lysosomal-associated membrane protein 2

Lamp1

Beclin

β-actin



Original photos used for Figure 6c. The expression of sXBP, uXBP1 and β-actin mRNA was evaluated by agarose gel electrophoresis using PCR products after RNA extraction and cDNA synthesis. The areas indicated by the boxes in photos are used in Figure 6c. The 100 bp DNA Ladder (NEW ENGLAND Bio Labs) was used as a M.W. marker. sXBP1, X-box binding protein 1 sliced form; uXBP1, XBP1 unsliced form

227 bp





Original photos used for Figure 6d. Western blotting of IRE1, p-IRE1, XBP1 and β-actin are shown. The areas indicated by the boxes in photos are used in Figure 6d. The MagicMark XP (Thermofisher) was used as a M.W. marker. IRE1, inositol-requiring enzyme 1; p-IRE1, phosphorylated IRE1; XBP1, X-box binding protein 1; sXBP1, X-box binding protein 1 sliced form; uXBP1, XBP1 unsliced form



Original photos used for Figure 6e. Western blotting of BiP, cATF6, p-EIF2a and β-actin are shown. The areas indicated by the boxes in photos are used in Figure 6e. The MagicMark XP (Thermofisher) was used as a M.W. marker. BiP, binding immunoglobulin protein; p-EIF2a, phosphorylated eukariotic initiation factor 2a; cATF6, cleaved activating transcription factor 6.



Original photos used for Figure 6f. Western blotting of LC-3 and β -actin are shown. The areas indicated by the boxes in photos are used in Figure 6f. The MagicMark XP (Thermofisher) was used as a M.W. marker. LC3, microtubule-associated protein light chain 3.