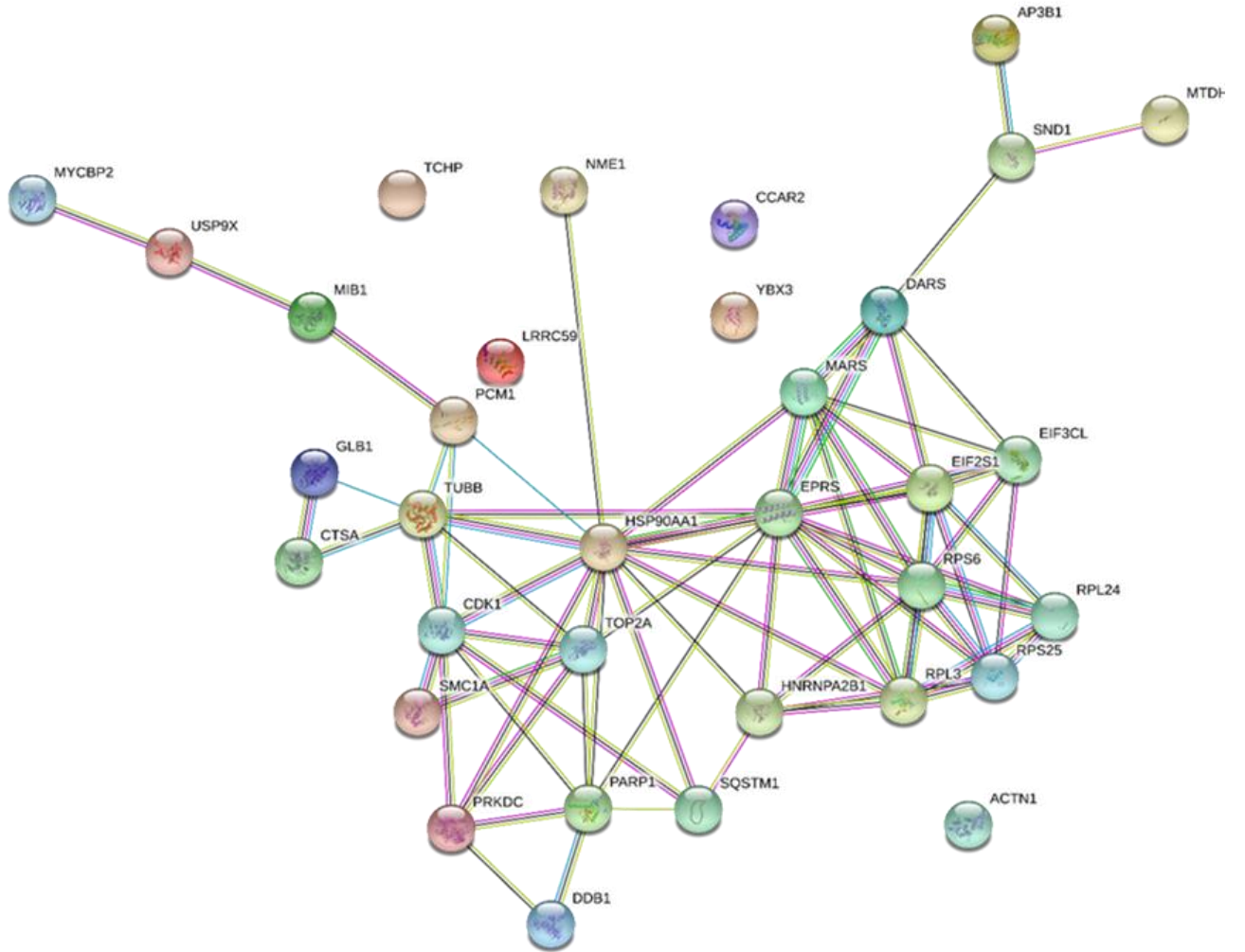


Appendix for “Trichoplein binds PCM1 and controls endothelial cell function by regulating autophagy”

Table of Content

Appendix Figure S1.....page 2
Appendix Figure S2.....page 4
Appendix Figure S3.....page 5
Appendix Figure S4.....page 6

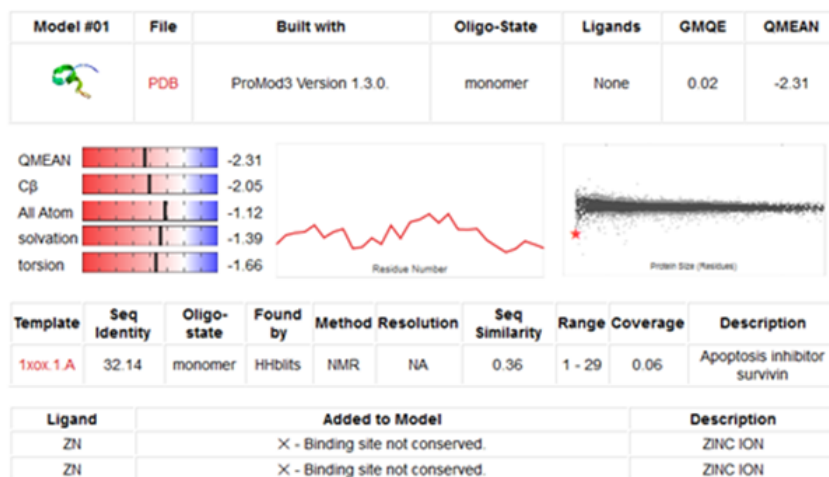
A



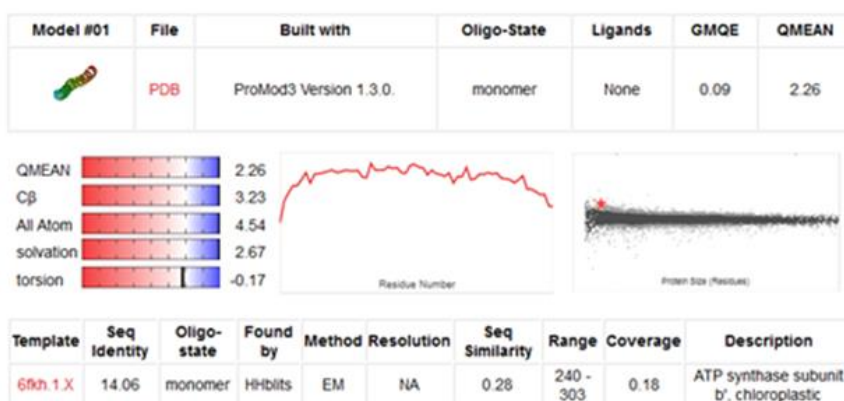
B

Protein models:

TCHP $\Delta 1$

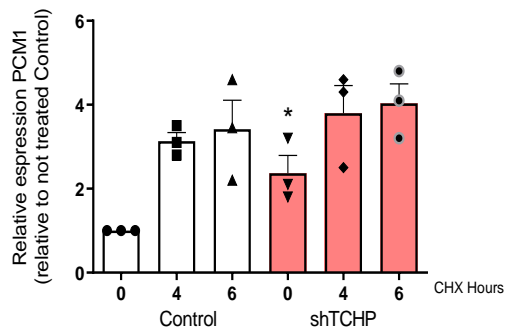
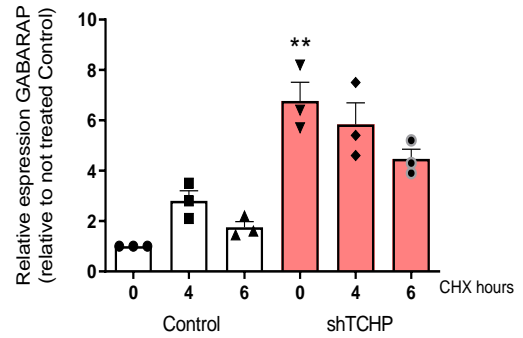


TCHP $\Delta 1,2$



Appendix Figure S1: Protein network and TCHP mutants analysis

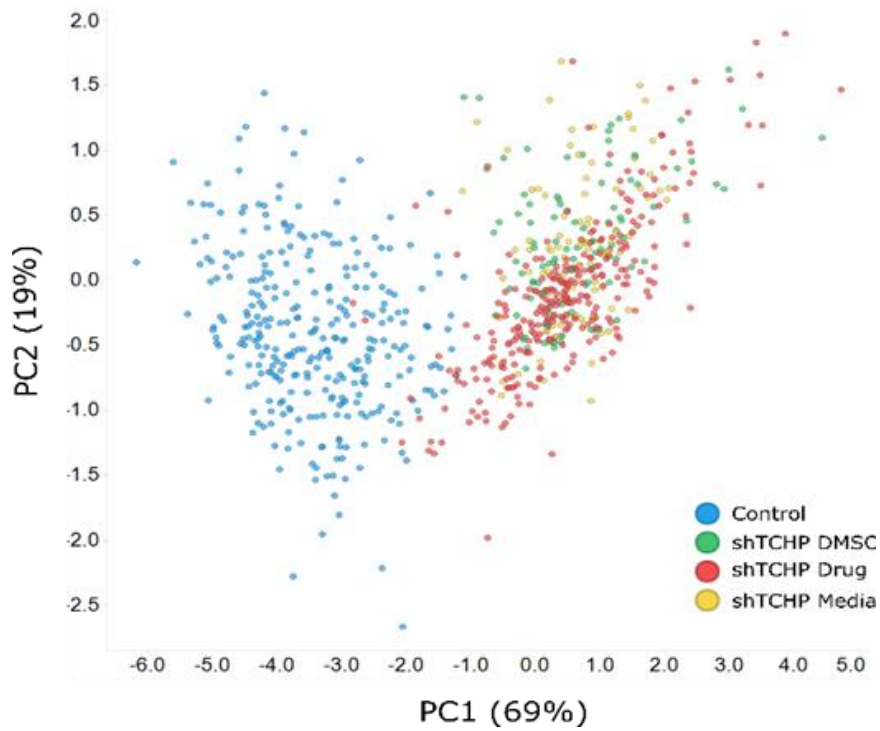
A, TCHP protein interaction network analysis using STRING software. **B**, The SWISS-MODEL (<https://swissmodel.expasy.org/>) template library (SMTL version 18-07-2019, PDB release 12-7-2019) was searched with BLAST (Camacho, C et al. 2009) and HHblits (Remmert et al. 2012) for evolutionary related structures matching the target sequence for TCHP $\Delta 1$ and TCHP $\Delta 1,2$. Top-hit homologues protein were Survivin for TCHP $\Delta 1$ and ATP synthase subunit b for TCHP $\Delta 1,2$

A**B****Appendix Figure S2: PCM1 and GABARAP expression**

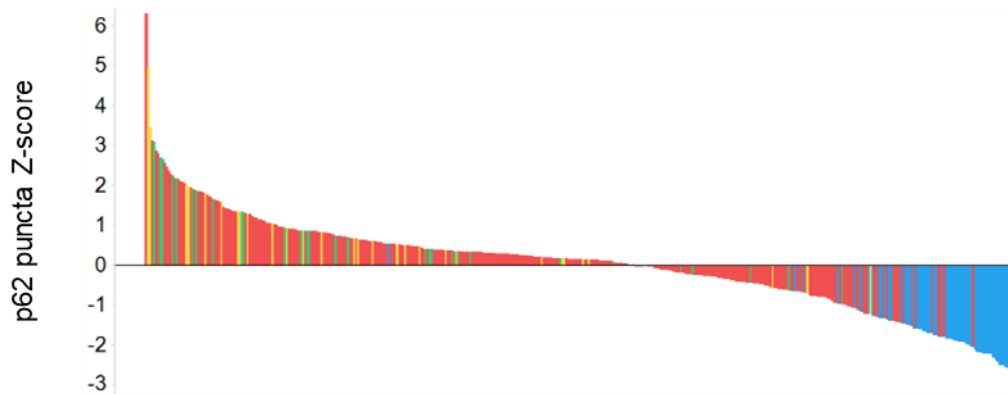
Expression of **A**, PCM1 and **B**, GABARAP in control or TCHP knock-down HUVECs were subjected to cycloheximide (CHX) for the indicated number of hours (A: one-way ANOVA, * $p = 0.0325$ vs control 0 hour; B: one-way ANOVA, ** $p = 0.0015$ vs control 0 hour).

Data information: statistical analyses were performed on at least three independent experiments. Data are represented as mean \pm SD.

A

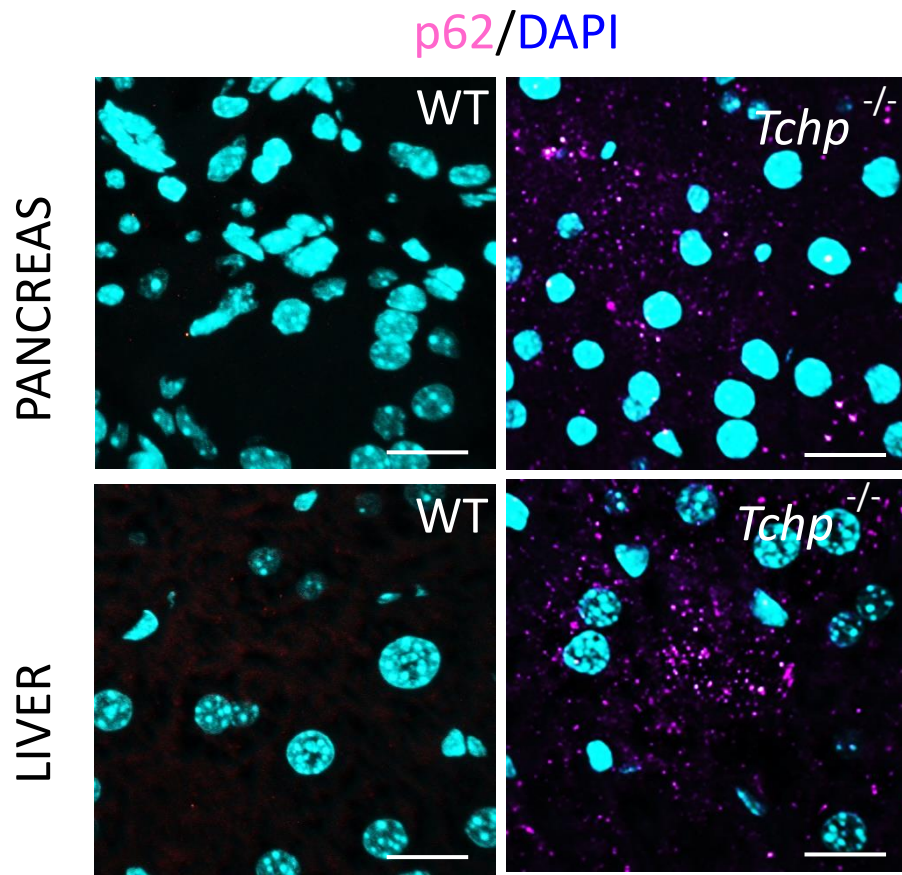


B



Appendix Figure S3: Phenotypic screening assay analysis

A, Principal component analysis of compound screen. Principal components (PC) 1 and 2 are shown and their respective variance indicated. **B**, Z-score ranking of cytoplasmic puncta of p62 immunostaining.



Appendix Figure S4: Characterization of *Tchp* knock-out mice

Representative images of the liver and pancreas of wild-type and *Tchp* knock-out mice stained for DAPI (blue) and p62 (red). Scale bars, 50 μ m.