SUPPLEMENTARY INFORMATION

DNAJB3 attenuates ER stress through direct interaction with AKT

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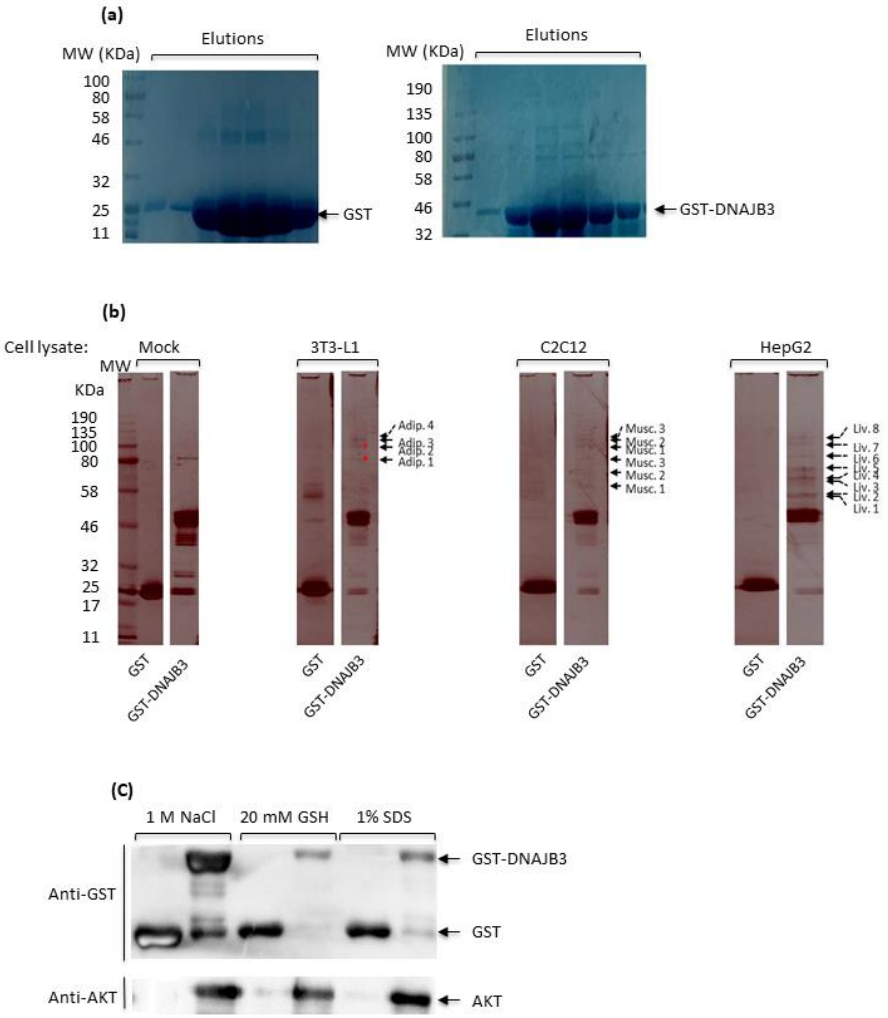
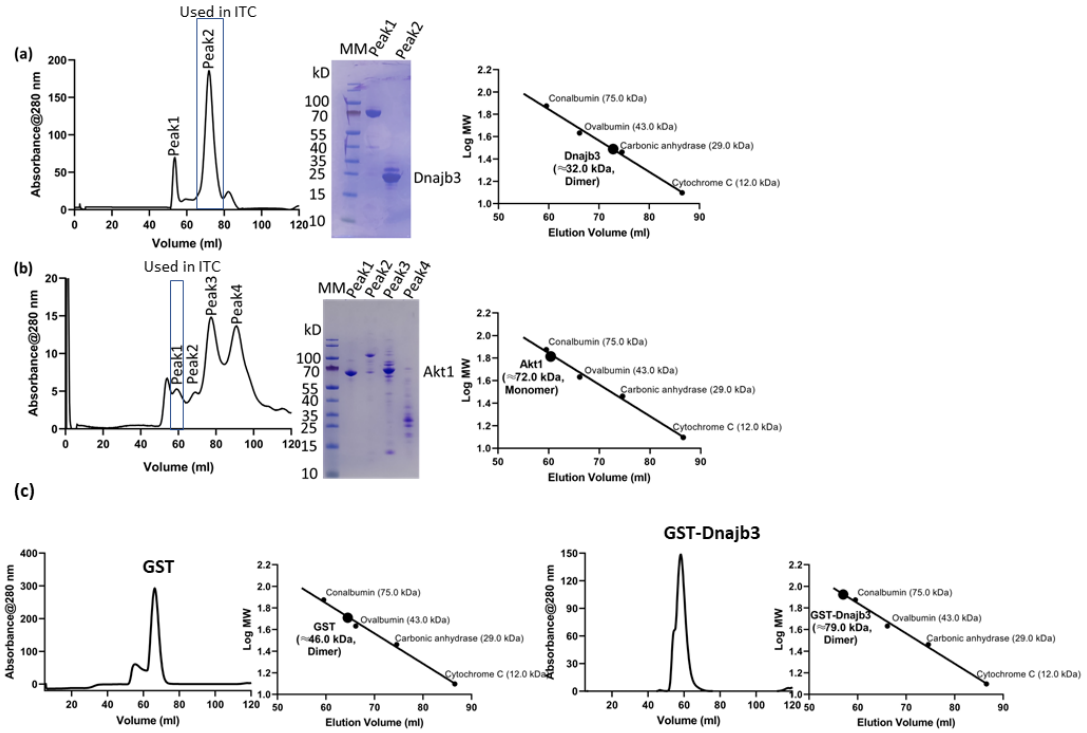
Supplementary Figure 1.



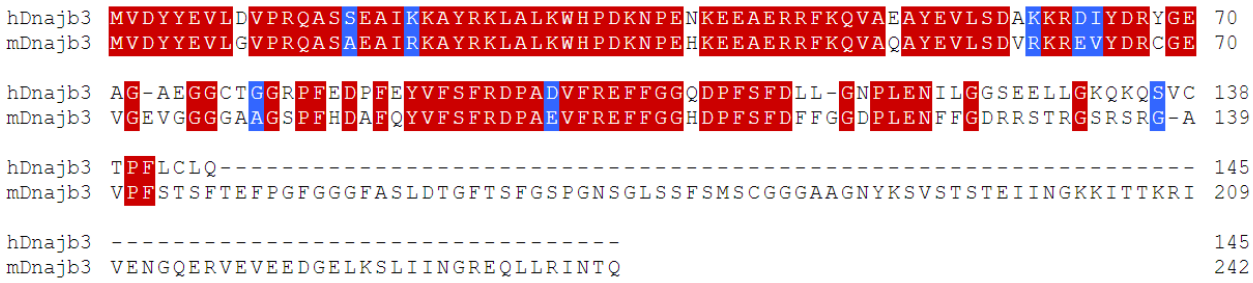
Supp. Figure 1: Full length coommassie staining images of GST and GST-DNAJB3 eluates (a). Representative silver stain images of the specific interacting partners of DNAJB3 after elution with 1% SDS using whole cell lysate from 3T3-L1 adipocytes, C2C12 skeletal muscle and HepG2 liver cells (b). (c) Detection of AKT in 1 M NaCl wash and in elutes as a specific interacting partner of DNAJB3 as revealed by Western blot using ant-AKT antibody. Anti-GST was used as control.

Supplementary Figure 2.



Supp. Figure 2: Purification of DNAJB3 and AKT1 protein. (a) Gel filtration chromatogram of DNAJB3. Affinity purified protein was concentrated and injected into gel filtration column. Protein peaks were run on SDS-PAGE. Peak2 fractions contain all the dimeric DNAJB3 protein. (b) Gel filtration chromatogram of AKT1. Affinity purified protein was concentrated and injected into gel filtration column. Protein peaks were run on SDS-PAGE. Peak1 fractions contain all the monomeric AKT1. (c) Gel filtration chromatography elution profile of GST and GST-Dnajb3.The elution profile of standard molecular masses were plotted along with our proteins to establish the oligomeric status of the proteins.

Supplementary Figure 3.



Supp. Figure 3: Protein sequence alignment of human DNAJB3 (hDNAJB3) and mouse DNAJB3 (mDNAJB3). The identical residues were shown as red, while similar residues as blue. Alignment highlights an extension of approx. 100 amino acids at C-terminal of mDNAJB3.