

Uncropped western blot images:

Conditions and marker molecular weights are indicated in blue; probed **antibodies** are indicated in pink. For more information, please refer to corresponding figure legends and Methods section.

Figure 1C:

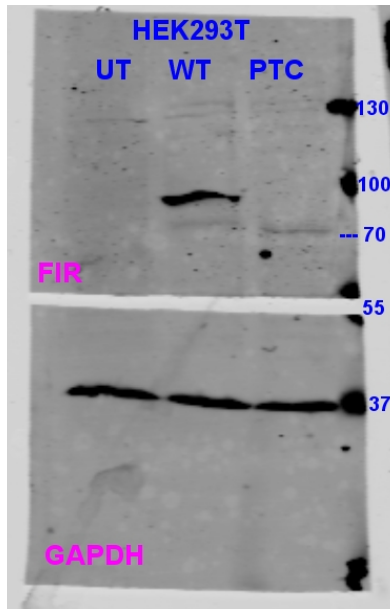
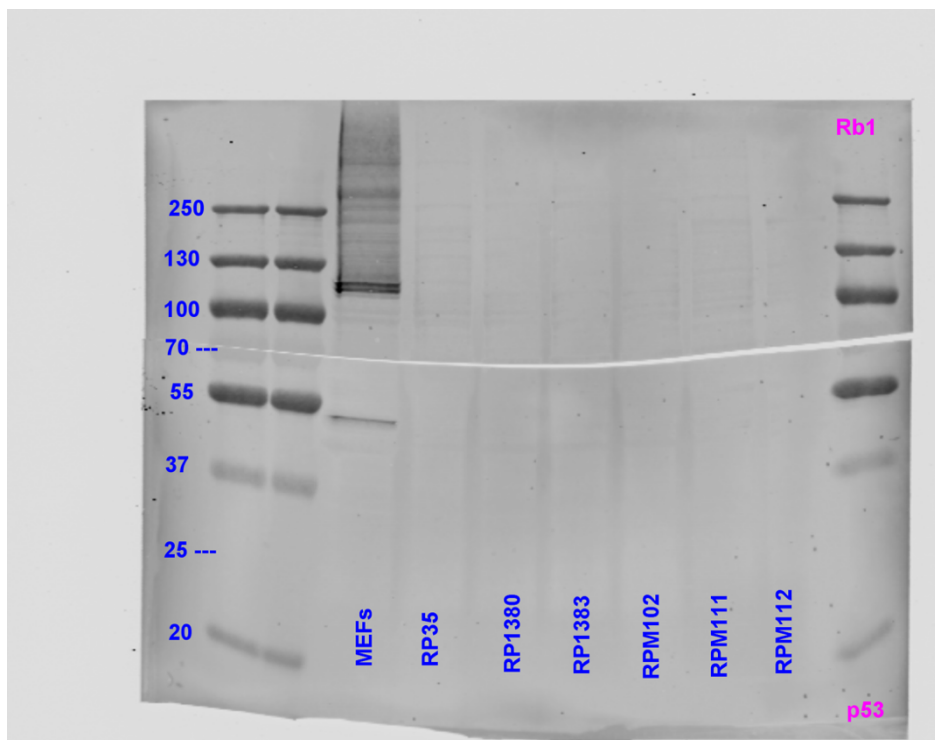


Figure 2S:



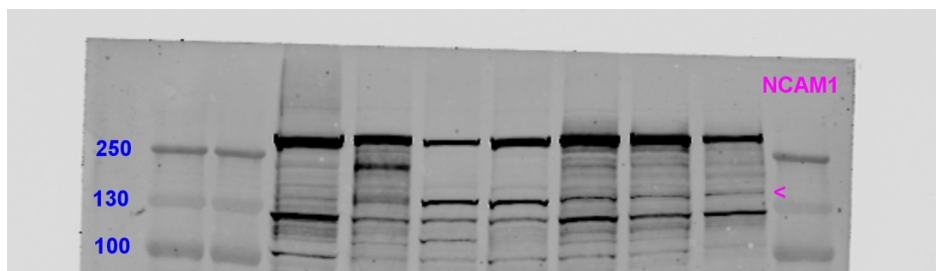
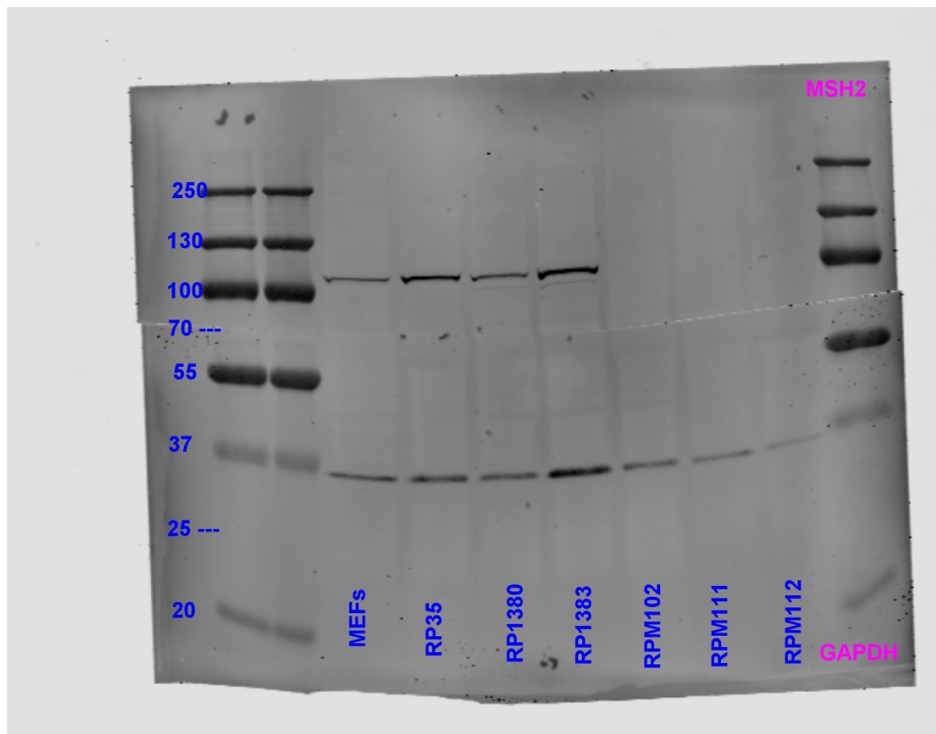
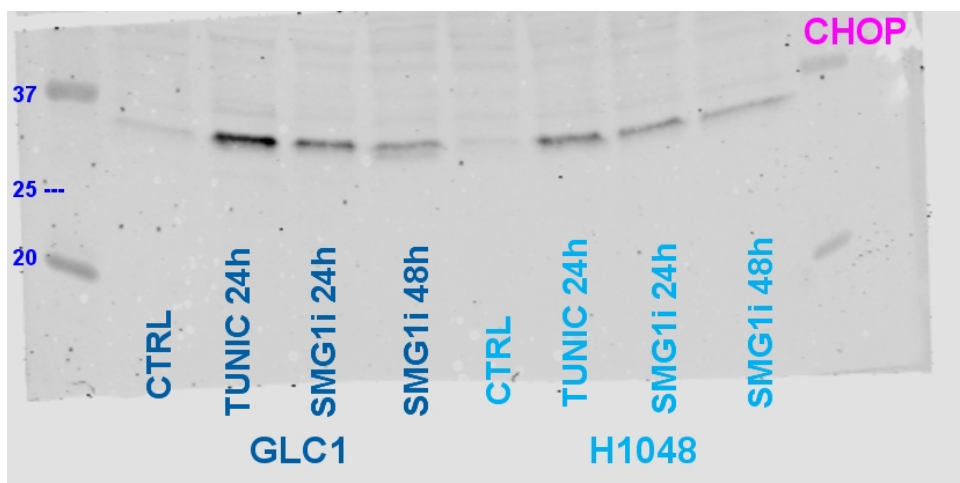


Figure 3C:



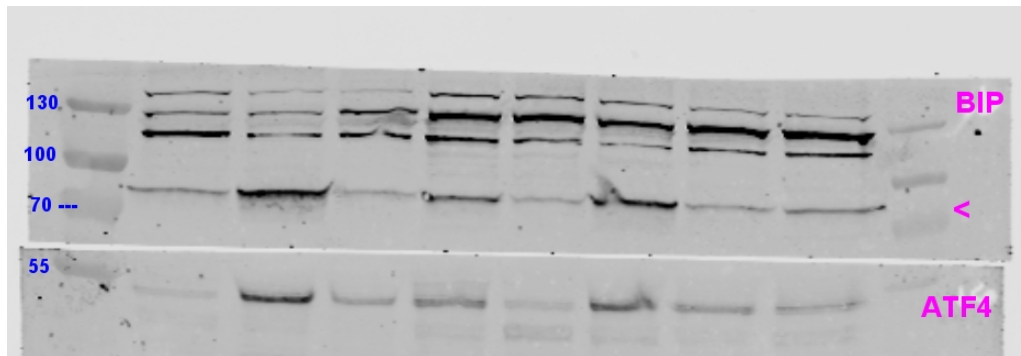
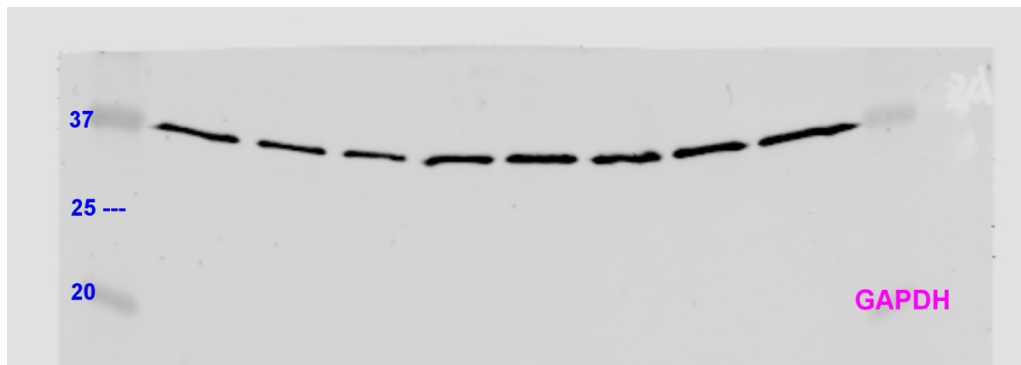
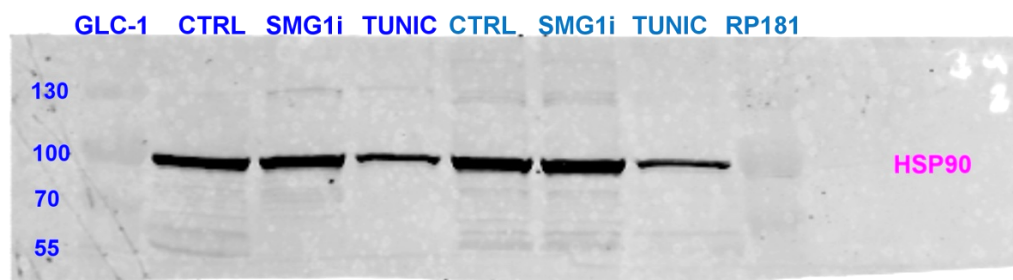
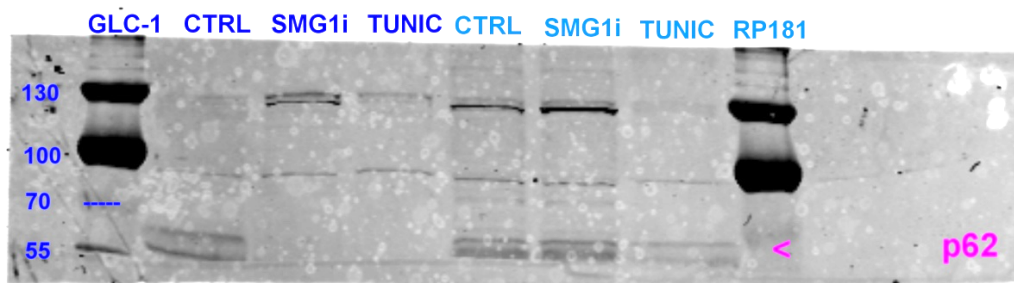
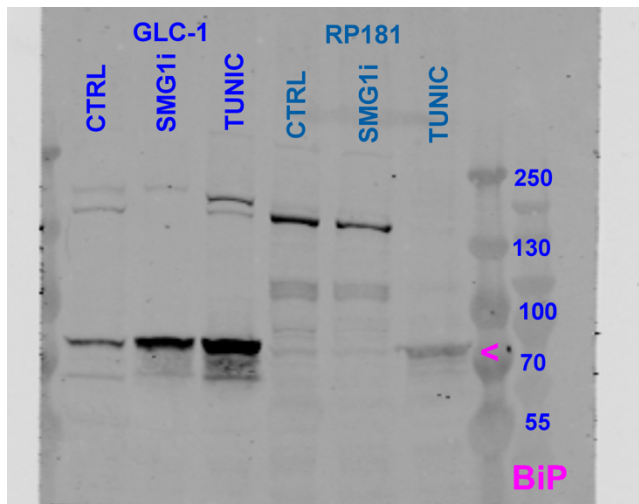


Figure 3D:





*Run on a separate blot due to close migration of BiP and p62 (both rabbit antibodies)

Figure 5E:

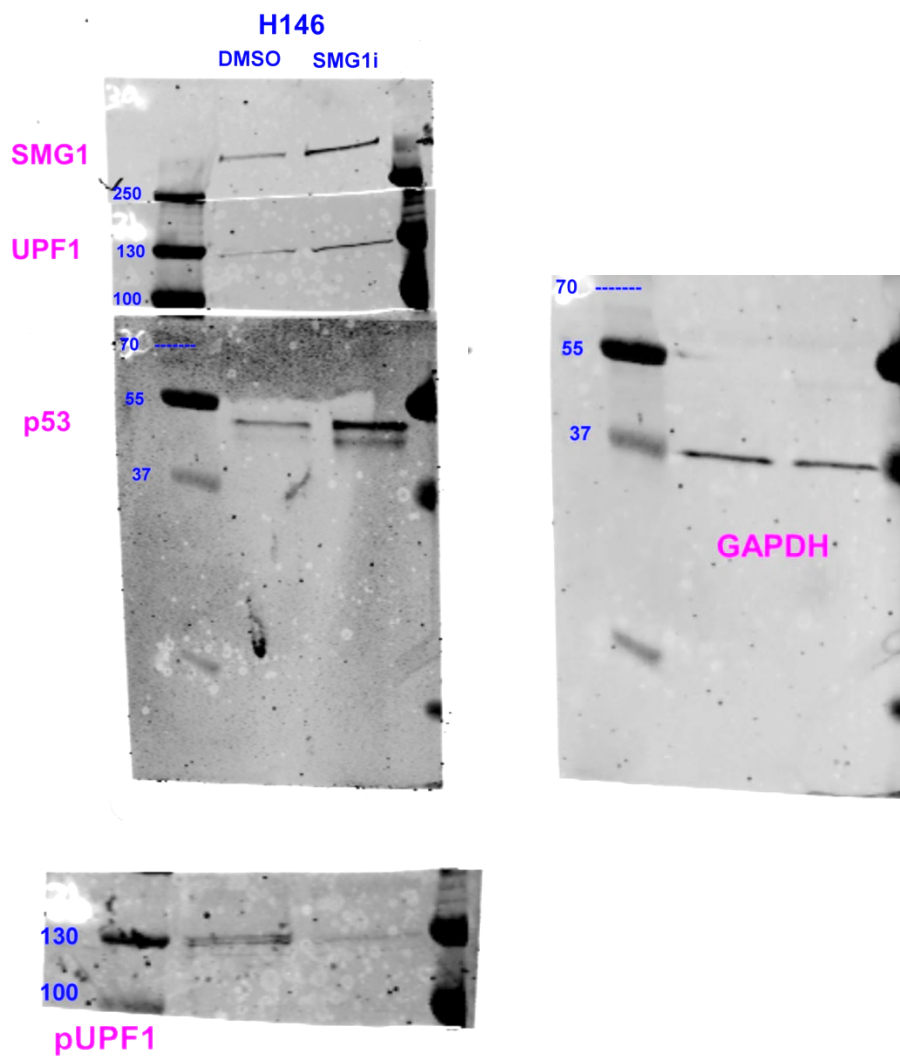
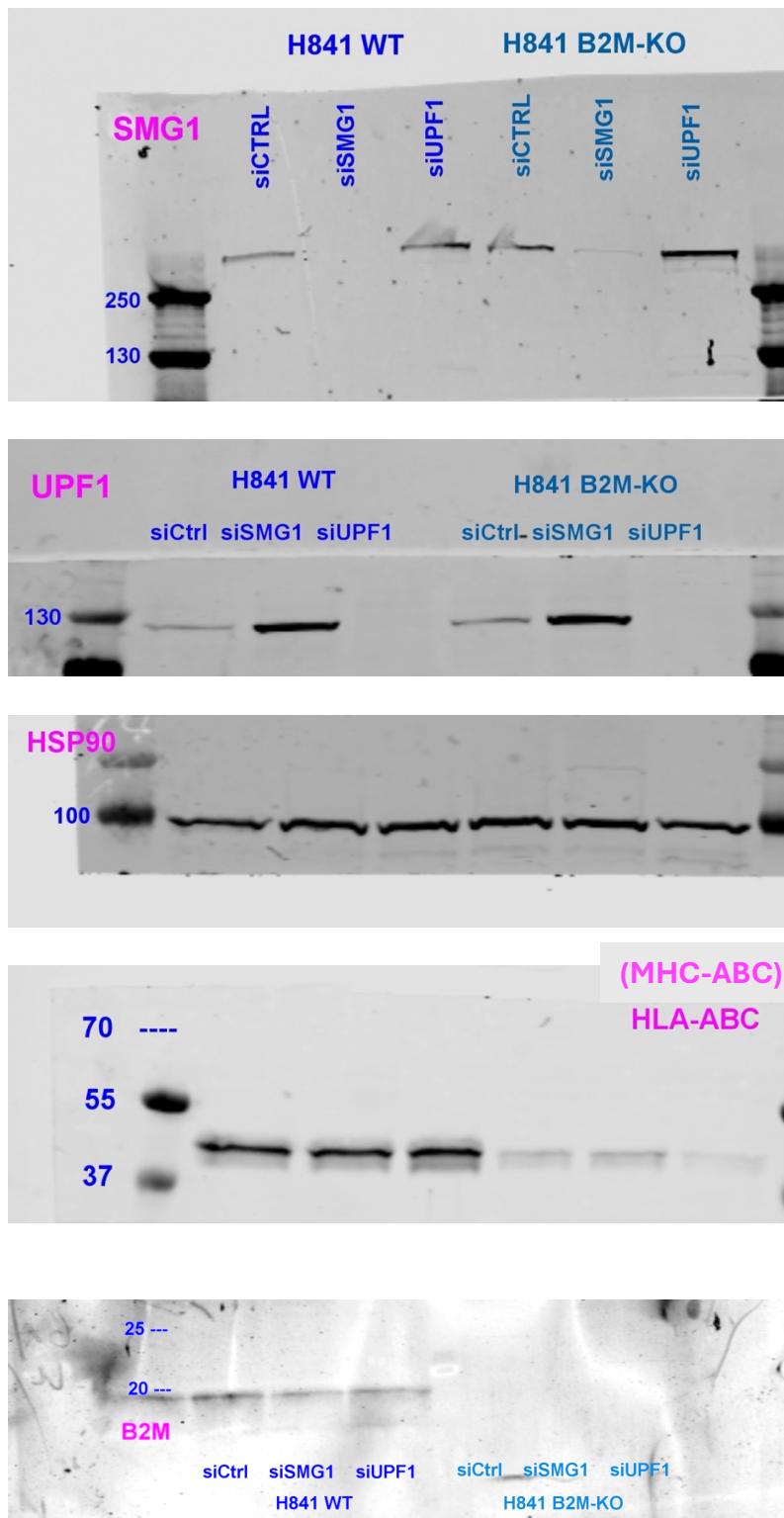


Figure 6C:



*Run on a separate blot because B2M is very small and required different transfer conditions

Figure S1F

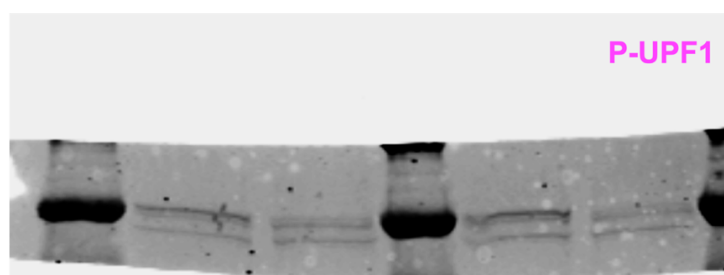
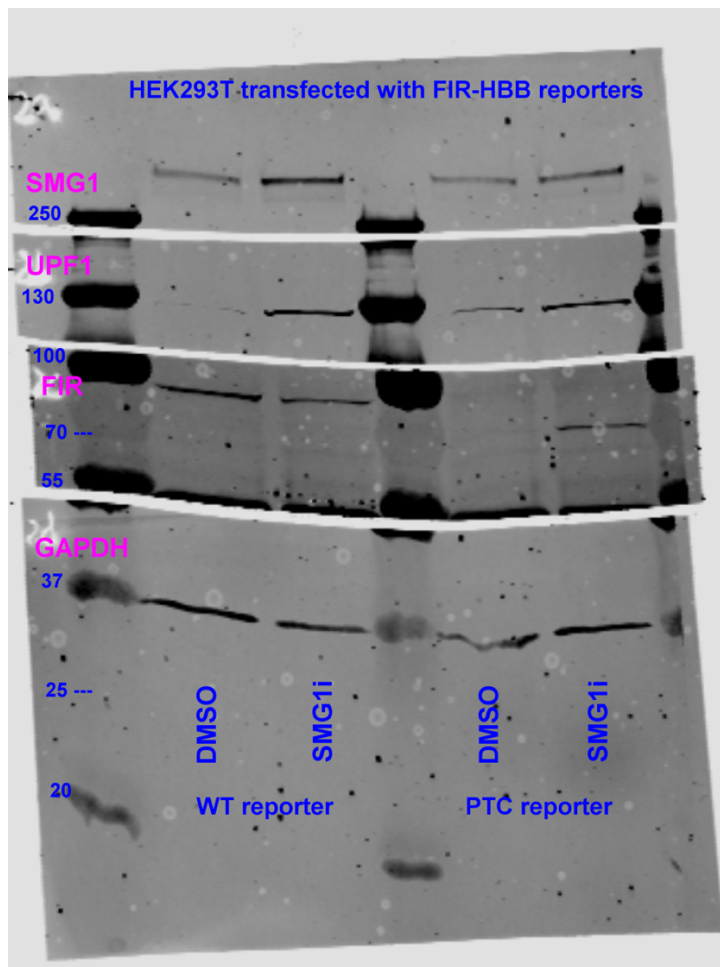
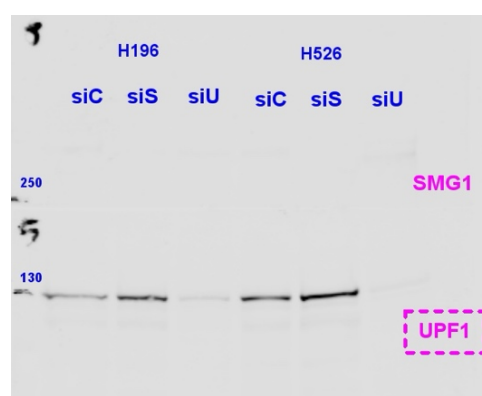
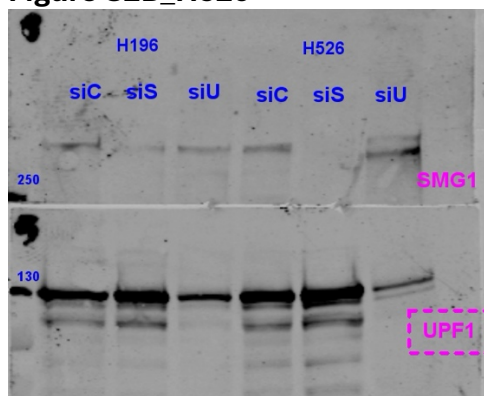


Figure S2B_H526



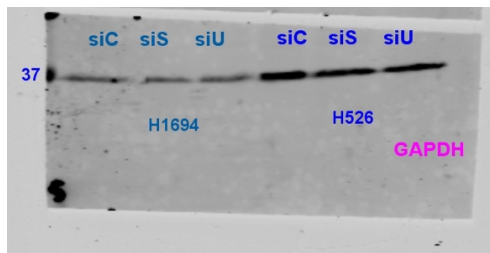


Figure S2B_H841

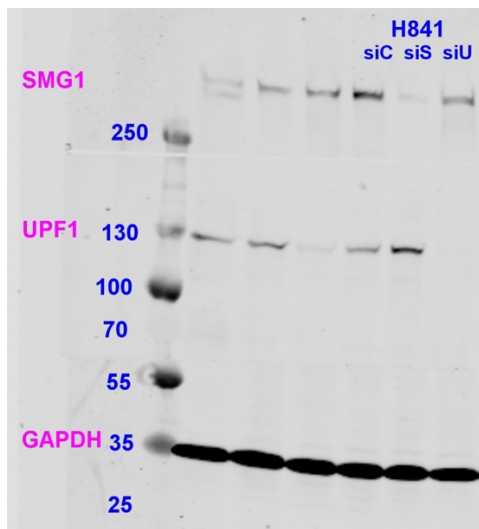


Figure S2B_H1048

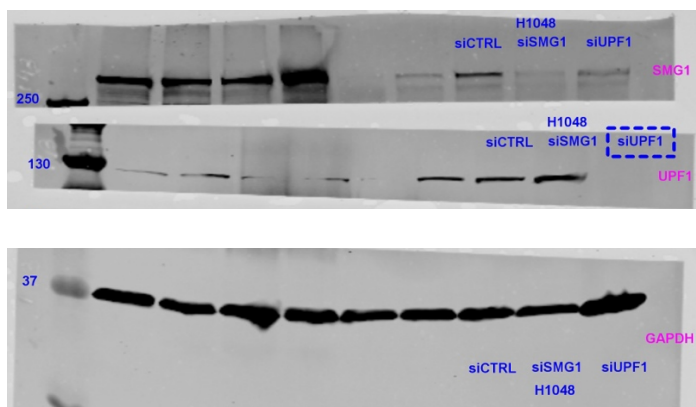
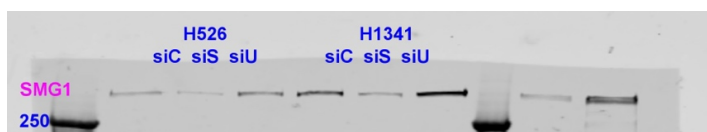


Figure S2B_H1341



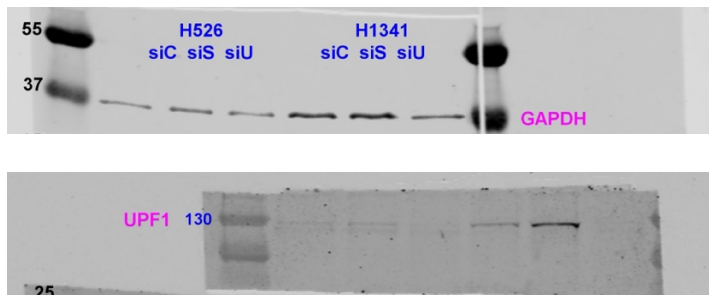


Figure S2B_GLC-1

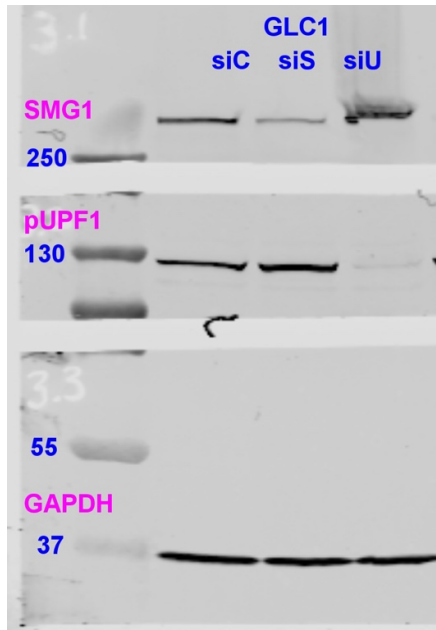
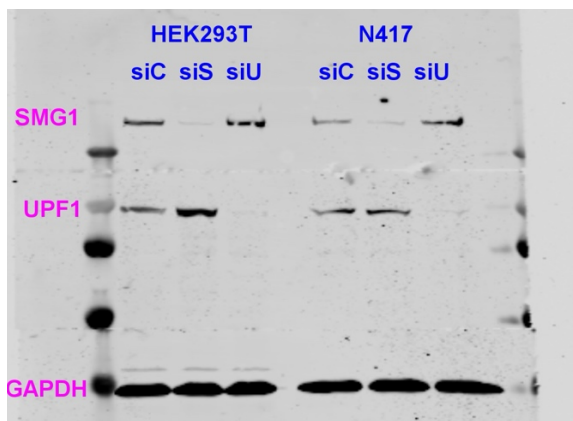


Figure S2B_N417



Western blot analysis showing SMG1 phosphorylation and total SMG1 levels. The top panel shows SMG1 phosphorylation (pUPF1) with molecular weight markers at 250, 130, 100, 70, and 55 kDa. The bottom panel shows total SMG1 levels with molecular weight markers at 150, 100, 70, and 55 kDa. The blots are probed with anti-phospho-SMG1 (pUPF1) and anti-SMG1 (Total UPF1) antibodies. The lanes are labeled: GCL1 (CTRL, SMG1), RP1380#1 (CTRL, SMG1), H1694 (CTRL, SMG1), and RP1380#2 (CTRL, SMG1). The SMG1 lanes show a shift in the phosphorylated band (pUPF1) compared to the CTRL lanes, indicating increased phosphorylation. The total SMG1 levels are consistent across all lanes.

Western blot analysis showing protein levels in RPM111 cells. The blots are organized into three main panels. The first panel shows SMG1 (230 kDa) and UPF1 (130 kDa) levels. The second panel shows GAPDH (37 kDa) levels. The third panel shows HSP90 (100 kDa) levels. Each panel has four lanes: RPM111#1 CTRL, RPM111#1 SMGi, RPM111#2 CTRL, and RPM111#2 SMGi. In the SMGi lanes, SMG1 and UPF1 levels are significantly reduced compared to the CTRL lanes. GAPDH and HSP90 levels are consistent across all lanes, serving as loading controls. A dashed box in the third panel highlights the UPF1 band in the RPM111#2 SMGi lane.

Figure S3C_UPF1, AKT, 4EBP

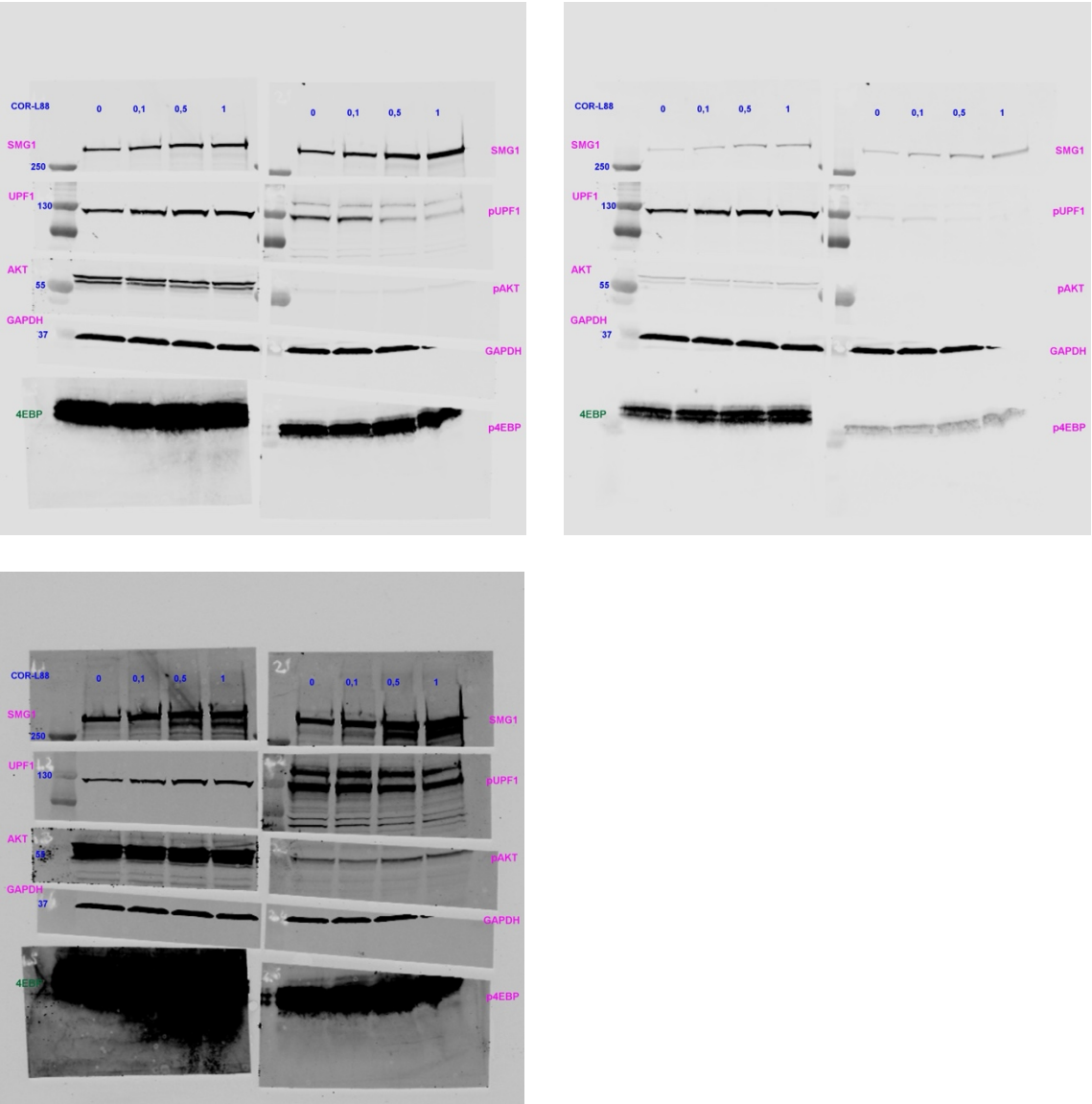


Figure S3C_STAT3

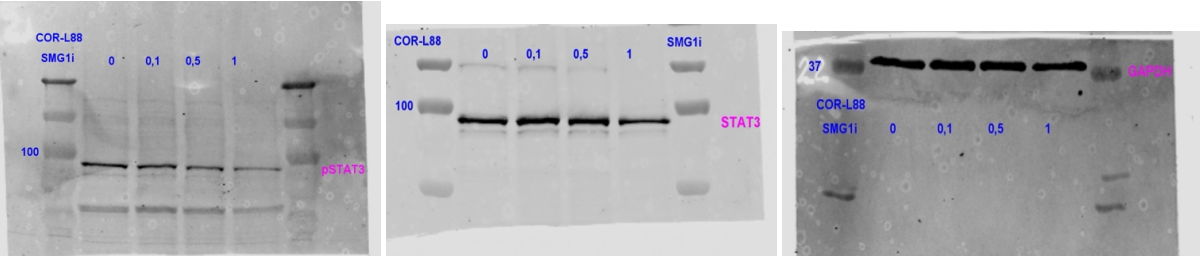


Figure S7G

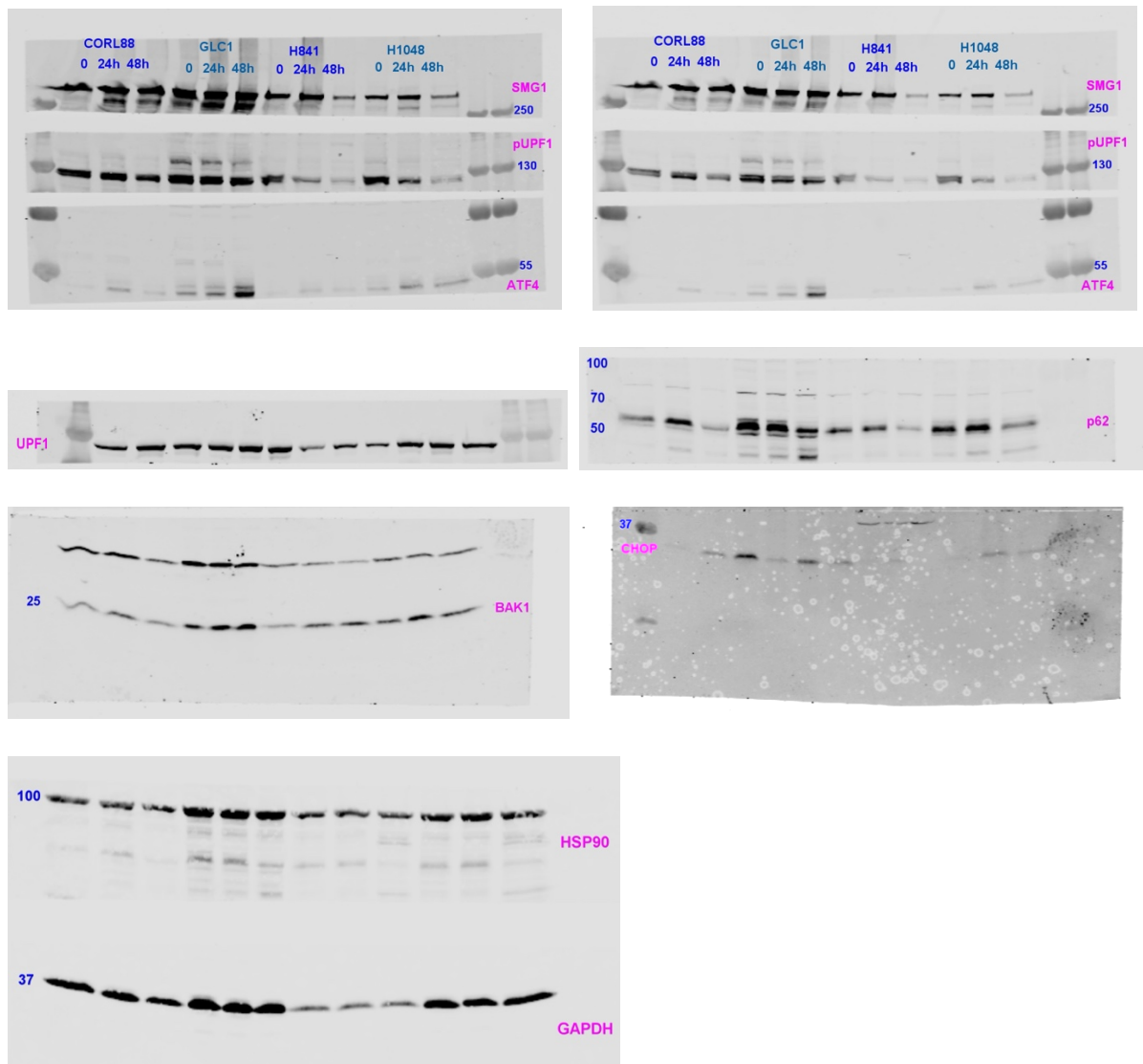
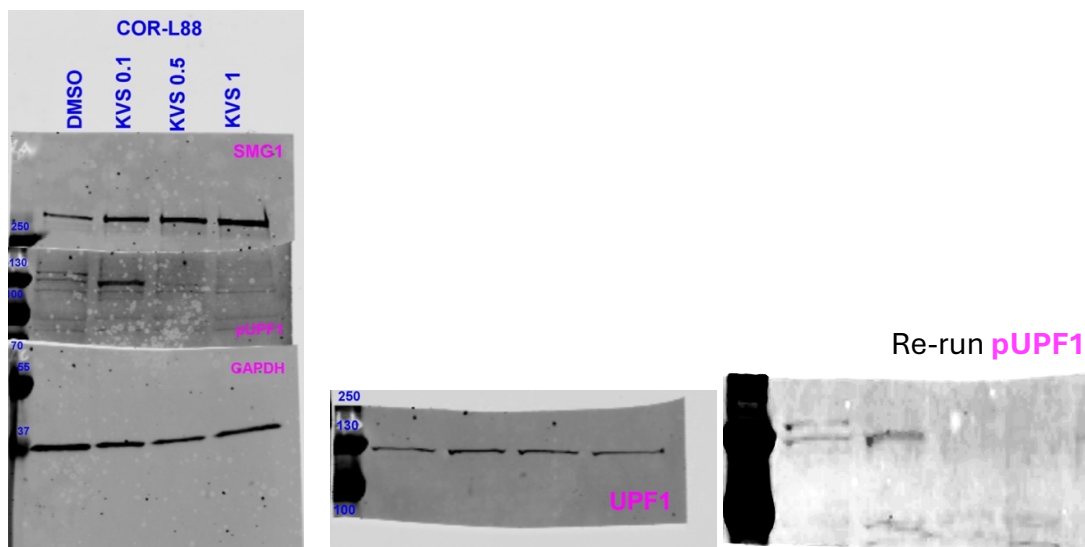


Figure S8A



Western blot analysis showing pUPF1 and TUBG1 protein levels. The top blot shows pUPF1 levels, with molecular weight markers at 130, 100, and 70 kDa. The bottom blot shows TUBG1 levels, with a molecular weight marker at 55 kDa. The blots are divided into two main sections: RP1380 and TetO shCTRL. The RP1380 section shows a single lane for CTRL. The TetO shCTRL section shows two lanes for CTRL and DOXY. The TetO shSMG1 section shows two lanes for CTRL and DOXY. The pUPF1 blot shows a strong band at 130 kDa in the CTRL lanes and a faint band at 100 kDa in the DOXY lanes. The TUBG1 blot shows a strong band at 55 kDa in all lanes, indicating equal protein loading.

Figure 1: Western blot analysis of SMG1 and PUPF1 phosphorylation in H841 cells. The figure consists of three panels. The top panel shows SMG1 phosphorylation (250 kDa) and PUPF1 phosphorylation (130 kDa) in H841 cells treated with DOXY, PAR, or TetO, with or without the inhibitor H841. The middle panel shows UPF1 phosphorylation (H841#1, H841#2) in H841 cells treated with DOXY, PAR, or TetO, with or without the inhibitor H841. The bottom panel shows TUBG phosphorylation (H841#1, H841#2) in H841 cells treated with DOXY, PAR, or TetO, with or without the inhibitor H841. Molecular weight markers are indicated on the left of each panel.

Figure S8D_GLC-1

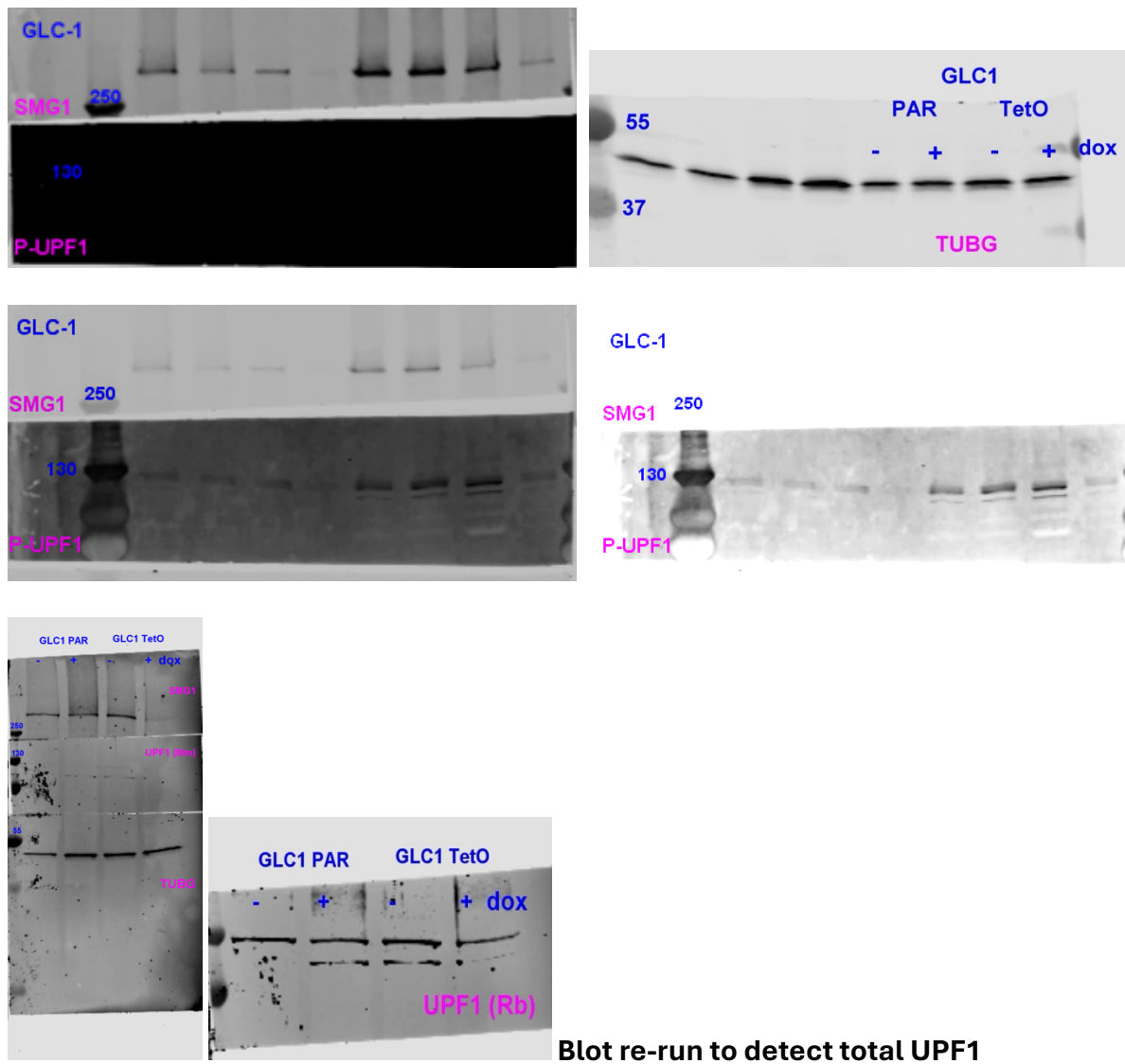


Figure S8D_H1048

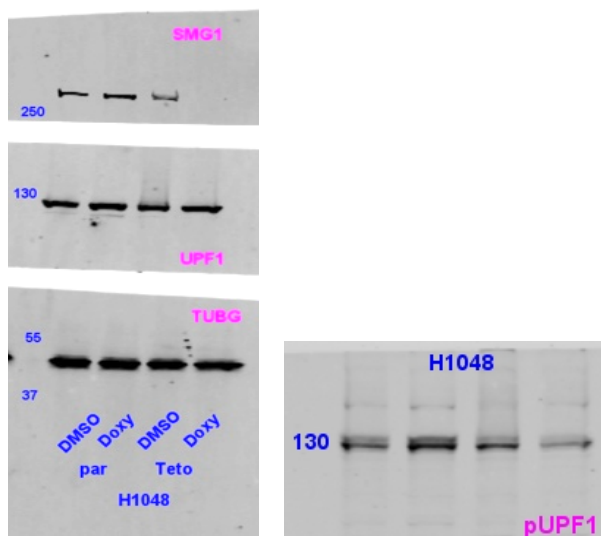


Figure 8H

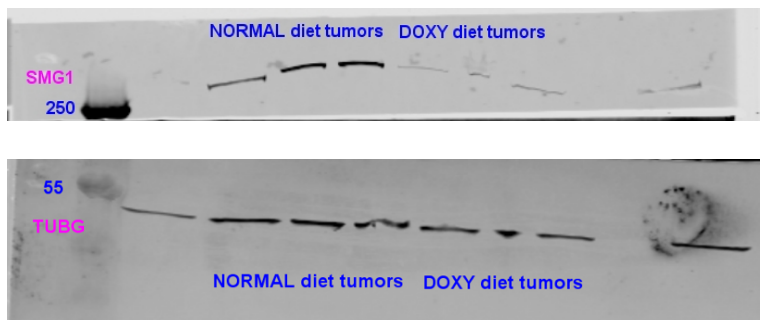


Figure S13C

