Supplementary Figure Legends

Figure S1: A) Representative images from Matrigel invasion assay experiments, indicated PDAC cell lines were stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm B) Rho activation assay was performed in PDAC cell lines and then stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Akti (5 µM) for 16h. C) Immunoprecipitation analysis of AKT and DLC1 in the indicated cancer cell lines stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), C38 Mab (50 µg) for 6h or AKTi (5 µM) for 16h. D) PDAC cells showing relative degree of RhoA protein suppression in siRNA mediated silencing of RhoA by immunoblot.

Figure S2: A,B) Representative images from Matrigel invasion assay experiments, indicated RhoA-silenced PDAC cell lines were stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm C, D) RhoA-silenced PDAC cell lines were stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm C, D) RhoA-silenced PDAC cell lines were stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze migration and invasion by EZcellTM cell migration and Matrigel invasion assay. mean ± SD of triplicates is shown.

Figure S3: A) quantitative RT-PCR analysis of YAP and TAZ genes in the PDAC cell lines stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h. B) PDAC cells showing relative degree of YAP and TAZ suppression in siRNA-mediated silencing of YAP/TAZ. C) RhoA-silenced PDAC cell lines stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), or GRP78 peptide (100 pM), for 6h or Fasudil (5 µM) for 16h and probed for indicated proteins. D,E) quantitative RT-PCR analysis of YAP and TAZ genes in the RhoA-silenced PDAC cell lines stimulated with $\alpha_2 M^*$ (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h.

Figure S4: A) PDAC cells showing relative degree of YAP/TAZ suppression in siRNAmediated silencing of YAP/TAZ by immunoblot. B) quantitative RT-PCR analysis of YAP and TAZ genes in the YAP/TAZ silenced PDAC cell lines stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h. C) Representative images from Matrigel invasion assay experiments. Indicated YAP/TAZ silenced PDAC cell lines were stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm D) quantitative RT-PCR analysis was performed in YAP/TAZ silenced PDAC cell lines stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm D) quantitative RT-PCR analysis was performed in YAP/TAZ silenced PDAC cell lines stimulated with α_2 M* (100 pM) for 30 min in the absence or presence of Scr peptide (100 pM), GRP78 peptide (100 pM), C38 Mab (50 µg) for 6h or Fasudil (5 µM) for 16h to quantify the transcript levels of the YAP/TAZ target genes Ctgf, Cyr61 and Axl. Figure S5: A) Representative images from Matrigel invasion assay experiments. Indicated PDAC cell lines receiving 0 or 3 Gy and then treated with Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h to analyze Matrigel invasion assay. Serum within the lower wells served as the chemoattractant. Scale bar 20 µm B) Immunoblot analysis of the PDAC cell lines after receiving 0 or 3 Gy and then treated with Scr peptide (100 pM), GRP78 peptide (100 pM), or C38 Mab (50 µg) for 6h prior to probing for indicated proteins. C) Immunoprecipitation analysis of P-AKT Ser⁴⁷³ and DLC1 in the PDAC cell lines receiving 0 or 3 Gy and then treated (100 pM), or C38 Mab (50 µg) for 6h prior to probing for indicated proteins. C) Immunoprecipitation analysis of P-AKT Ser⁴⁷³ and DLC1 in the PDAC cell lines receiving 0 or 3 Gy and then treated with Scr peptide (100 pM), or C38 Mab (50 µg) for 6h prior to probing for indicated proteins. D) Indicated PDAC cell lines receiving 0 or 3 Gy and then treated with AKTi (5 µM) or Fasudil (5 µM) for 16h to analyze migration and invasion by EZcellTM cell migration and Matrigel invasion assay. mean \pm SD of triplicates is shown. E) Representative images from Matrigel invasion assay experiments as mentioned in D. Scale bar 20 µm *, *p* values \leq 0.05.









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Scr peptide GRP78 peptide

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siYAP/TAZ

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siYAP/TAZ

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Α в 3 Gy PANC-1 MIA PaCa-2 C38 Mab GRP78 peptide Scr peptide Scr GRP78 --+ _ -+ 0 Gy UT peptide C38 Mab peptide + + -+ -÷ 3 Gy 0 Gy ŧ + + ŧ PANC-1 _ _ --75 -75 P-AKT(S473) 50-75--50 75 **MIA PaCa-2** AKT 50-50 150 150 P-DLC1(S986) 100-100 150 150 DLC1 100-100 С 37-25-PANC-1 IP: PAKT(S473) MIA PaCa-2 GAPDH 37 IP: PAKT(S473) C38 Mab GRP78 peptide Scr peptide D 3 Gy + + + PANC-1 200 200 MIA PaCa-2 0 Gy IgG Beads -% of migrated cells 150 150 150-150 -IB: DLC1 100--100 100 100 75 -75 IB: PAKT(S473) **50**-50 50 50 0 0 200 200 Е 3 Gy 0 Gy UT AKTi Fasudil % of invaded cells 150 150 PANC-1 100 100 50 50 **MIA PaCa-2** 0 0

0 Gy 3 Gy AKTi Fasudil

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