

Supplementary Figure Legends

Supplementary Figure-1: LAMC2 is significantly overexpressed and positively linked with pathological stages in PDAC.

A. LAMC2 expression in GSE60980, GSE62452, and GSE16515. B. Elevated expression of LAMC2 in PDAC (n=179) versus normal pancreatic specimens (n=171) in the GTEX and GEPIA databases. C. *LAMC2* transcripts were positively associated with pathological stages in PDAC samples. HNSC, head and neck squamous cell carcinoma; OV, ovarian serous cystadenocarcinoma; LUSC, lung squamous cell carcinoma; COAD, colon adenocarcinoma; ESCA, esophageal carcinoma; CESC, cervical squamous cell carcinoma; BLCA, bladder urothelial carcinoma; KIRP, kidney renal papillary cell carcinoma; CHOL, cholangiocarcinoma.

Supplementary Figure-2: LAMC2 protein expression in PDAC cell lines and tissue samples.

A. Densitometric analysis showed LAMC2 expression in a panel of PDAC cell lines. Strong, moderate, and weak LAMC2 protein reactivity was detected in PDAC tissues.

Supplementary Figure-3: Knockdown of LAMC2 inhibited proliferation and clonogenic growth in PDAC.

A. Panc0203, BxPC-3 cells showed LAMC2 knockdown both at the transcript and protein levels in LAMC2 shRNA stable clones than scramble shRNA. GAPDH was used for normalization and internal control. All the experiments were performed thrice in biological triplicates and the results represent mean $\pm$ SD. ***P-value <0.0001; two-tailed t-test. B. LAMC2 shRNA suppressed the growth of Panc0203, BxPC-3 cells. Results represent mean $\pm$ SD; n = 3. **P-value < 0.001; ***P-value <0.0001; two-tailed t-test. C. LAMC2 knockdown inhibited the clonogenic ability of Panc0203, BxPC-3 cells. Data represents mean $\pm$ SD; n = 3. **P-value < 0.001; ***P-value <0.0001; two-tailed t-test.

Supplementary Figure-4: knockdown of LAMC2 inhibited migration, invasion of Epithelial-

Mesenchymal (EMT) in PDAC.

A and B. LAMC2 knockdown inhibited migration and invasion of Panc0203, and BxPC-3 cells. Results represent mean $\pm$ SD; n = 3. **P-value < 0.001; two-tailed t-test. C. LAMC2 knockdown decreased protein expression of LAMC2, Snail, ZEB1, N-cadherin, vimentin, and increased E-cadherin protein expression in Panc0203. D. qPCR results displayed inhibition of *LAMC2*, *Snail*, *ZEB1*, *N-cadherin*, *vimentin*, and induction of *E-cadherin* in BxPC-3 cells. Results represent mean $\pm$ SD; n = 3. **P-value < 0.001; ***P-value <0.0001; two-tailed t-test.

Supplementary Figure-5: Knockdown of LAMC2 suppressed the tumor growth in PDAC

xenografts. A. Photographs of dissected tumors displayed decreased tumor size and growth in the

30 LAMC2 silenced group compared to scramble shRNA group. B. Tumor weights were lowered in
31 LAMC2 silenced tumors than scramble shRNA tumors. ***P-value <0.0001; C. qPCR displayed a
32 marked decrease in transcripts of mesenchymal markers and increased transcripts of the epithelial
33 marker. **P-value < 0.001; ***P-value <0.0001; two-tailed t-test.