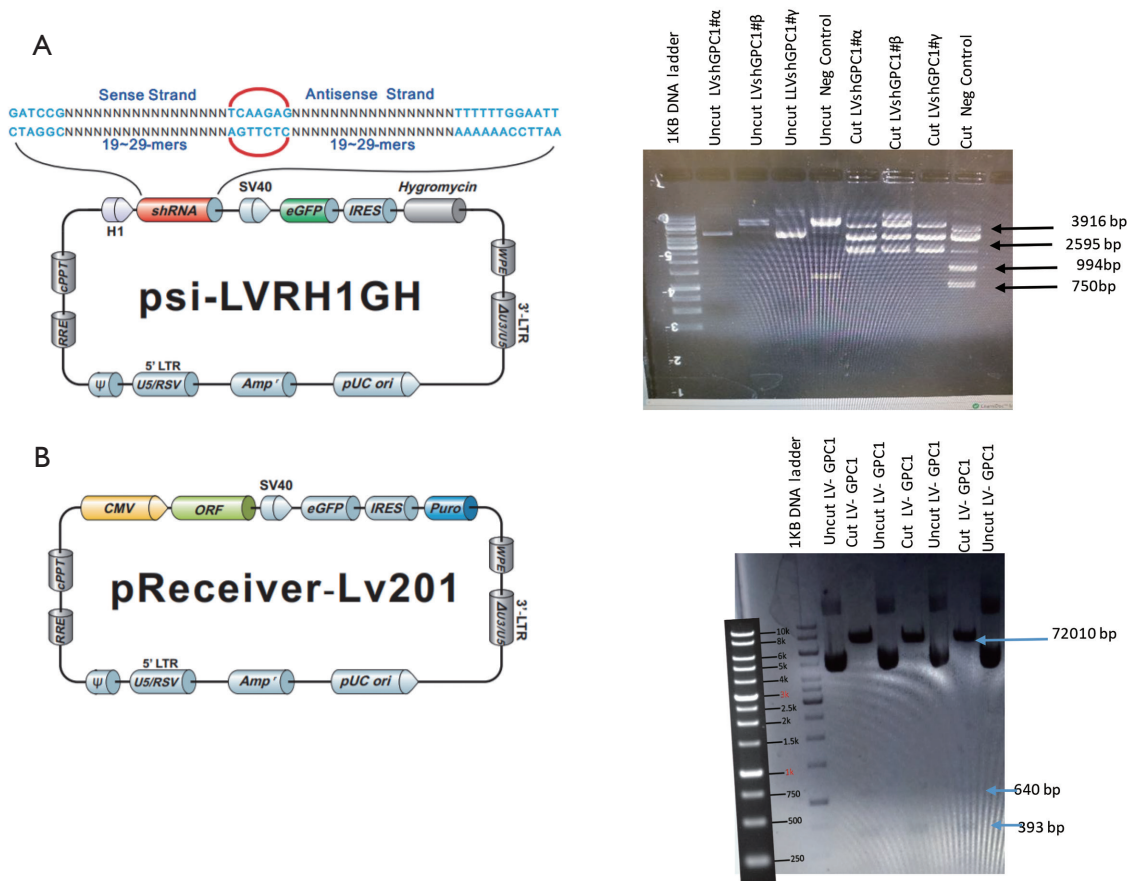
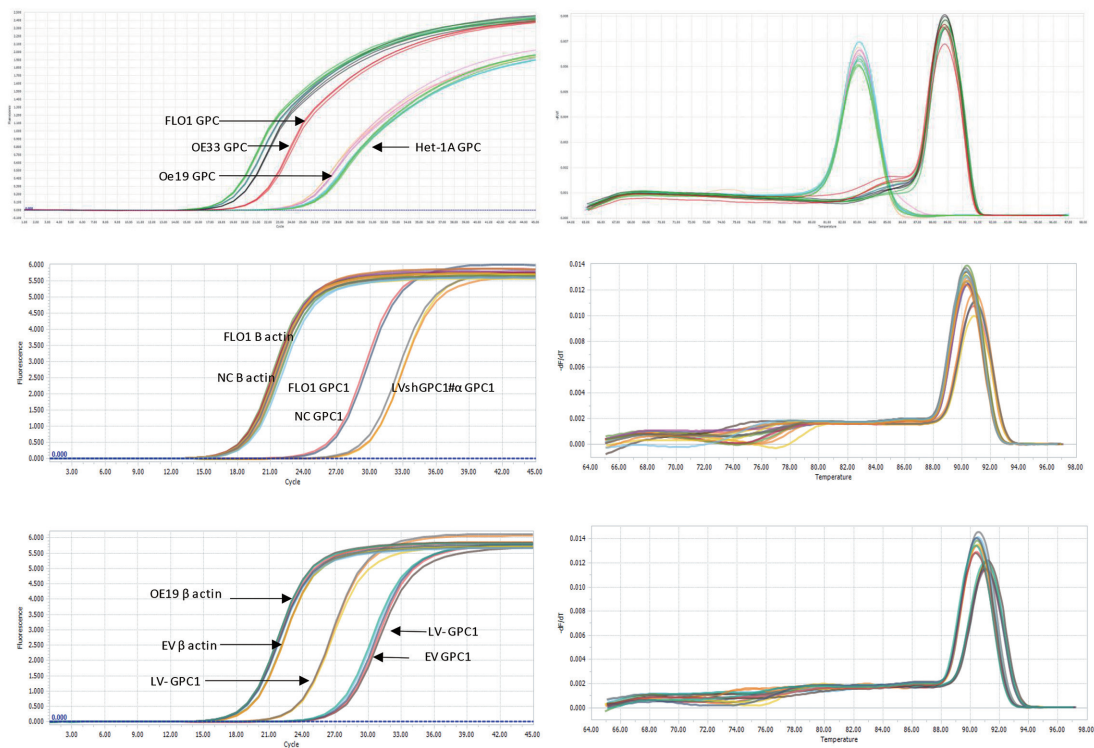


**Figure S1** Hematoxylin and eosin stained and anti-GPC1 stained microarray slides.



**Figure S2** (A) Vector map and restriction digest of Lenti-GPC plasmids. shRNA were cloned and digested with HindIII which cuts at 1587 bp and 5503 bp and yields a 3.916 kb and 2.595 kb fragment. Negative control was digested with HindIII which cuts at 1587, 5503 and 6497 bp giving a 3.916 kb, 2.595 kb, 994 bp and 750 bp. Digests were ran on a 2% gel along with a 1 kb DNA ladder. (B) Vector map and restriction digest of GPC1 Lenti-overexpression plasmid. P-Lv201 vector for overexpressing GPC1 digested with SacIII which gives 3 fragments 7210, 540 and 393 bp. Digests were ran on a 2% gel along with a 1kb DNA ladder.



**Figure S3** Amplification curves and Melting peaks of qRT-PCR runs on cell lines, knockdown and knock in experiments.

**Table S1** Sequence of GPC1 Lenti-shRNA clones and GPC1 overexpression plasmid

| Clone              | Gene               | Location | Length | Target sequence          |
|--------------------|--------------------|----------|--------|--------------------------|
| LVshGPC1# $\alpha$ | GPC1 (NM_002081.2) | 2,965    | 21     | CAAACATGCATCCATTTACT     |
| LVshGPC1# $\beta$  | GPC1 (NM_002081.2) | 956      | 21     | GTGCTCGAGAGCTGTCATGAA    |
| LVshGPC1# $\gamma$ | GPC1 (NM_002081.2) | 1,029    | 21     | GACTATTGCCGAAATGTGCTC    |
| Negative control   | –                  | –        | 19     | GCTTCGCGCCGTAGTCTTA      |
| LV- GPC1           | GPC1 (NM_002081.2) | 1,677    | 24     | GATAGCACTGAGCACCTGTTCCAG |

**Table S2** Primer sequence of GPC1 and Beta actin for qRT-PCR

| Target sequence |                             |
|-----------------|-----------------------------|
| GPC1            |                             |
| Forward primer  | 5'-TGAAGCTGGTCTACTGTGCTC-3' |
| Reverse primer  | 5'-CCCAGAACTTGTCGGTGATGA-3' |
| Beta actin      |                             |
| Forward primer  | 5'-TTGGCCAGGGGTGCTAAG-3'    |
| Reverse primer  | 5'-AGCCAAAAGGGTCATCATCTC-3' |

**Table S3** Antibodies and working conditions

| Antibody                     | Manufacturer   | Catalogue # | Dilution          |
|------------------------------|----------------|-------------|-------------------|
| GPC1                         | Abcam          | ab199343    | 1:1,000; 4 °C O/N |
| Coralite 594 conjugated PCNA | Proteintech    | CL594-10205 | 1:50; 4 °C O/N    |
| β tubulin                    | Cell signaling | –           | 1:1,000; RT 1 hr  |
| β actin                      | Santa cruz     | s c-47778   | 1:1,000; RT 1 hr  |
| Phalloidin-iFluor 647        | Abcam          | ab176759    | 2:1,000; 2 h RT   |
| Cyclin D1                    | Proteintech    | 26939-1-AP  | 1:1,000; 4 °C O/N |
| Cyclin E1                    | Cell signaling | 20808T      | 1:1,000; 4 °C O/N |
| CDK2                         | Proteintech    | 10122-1-AP  | 1:1,000; 4 °C O/N |
| CDK4                         | Proteintech    | 11026-1-AP  | 1:1,000; 4 °C O/N |
| CDK6                         | Proteintech    | 14052-1-AP  | 1:1,000; 4 °C O/N |
| Caspase 3                    | Proteintech    | 19677-1-AP  | 1:1,000; 4 °C O/N |
| PARP                         | Proteintech    | 13371-1-AP  | 1:1,000; 4 °C O/N |
| Bax                          | Proteintech    | 50599-2-1g  | 1:1,000; 4 °C O/N |
| E-cadherin                   | Cell signaling | 3195S       | 1:1,000; 4 °C O/N |
| N-cadherin                   | Cell signaling | 13116S      | 1:1,000; 4 °C O/N |
| ZEB1                         | Proteintech    | 21544-1-AP  | 1:1,000; 4 °C O/N |
| SNAIL1                       | Proteintech    | 13099-1-AP  | 1:1,000; 4 °C O/N |
| ZO1                          | Proteintech    | 21773-1-AP  | 1:1,000; 4 °C O/N |
| Twist                        | Genetex        | GTX127310   | 1:500, 4 °C O/N   |
| Vimentin                     | Cell signaling | 5741S       | 1:1,000; 4 °C O/N |
| Beta catenin                 | Cell signaling | 9561S       | 1:1,000; 4 °C O/N |
| Total GSK3β                  | Proteintech    | 22104-1-AP  | 1:1,000; 4 °C O/N |
| p- GSK3β                     | Cell signaling | 5558S       | 1:1,000; 4 °C O/N |
| Total β catenin              | Proteintech    | 51067-2-AP  | 1:1,000; 4 °C O/N |
| p-AKT                        | Cell signaling | 4060S       | 1:1,000; 4 °C O/N |
| AKT                          | Cell signaling | 4691S       | 1:1,000; 4 °C O/N |
| p-ERK                        | Cell signaling | 9101S       | 1:1,000; 4 °C O/N |
| ERK                          | Cell signaling | 9102S       | 1:1,000; 4 °C O/N |