

**Table SVI.** Association of linc01614 expression with clinical parameters of patients with pancreatic cancer (TCGA).

| Parameter                      | linc01614 expression |      | $\chi^2$ value | P-value |
|--------------------------------|----------------------|------|----------------|---------|
|                                | Low                  | High |                |         |
| Age (years)                    |                      |      |                | 0.744   |
| <60                            | 26                   | 28   | 0.107          |         |
| $\geq 60$                      | 62                   | 60   |                |         |
| Sex                            |                      |      |                | 0.069   |
| Male                           | 54                   | 42   | 3.3            |         |
| Female                         | 34                   | 46   |                |         |
| Tumor size                     |                      |      |                | 0.618   |
| <20 mm                         | 2                    | 1    |                |         |
| $\geq 20$ mm                   | 79                   | 82   |                |         |
| Tumor location                 |                      |      |                | 0.364   |
| Head                           | 66                   | 71   | 0.824          |         |
| Body or tail                   | 22                   | 17   |                |         |
| Histological grade             |                      |      |                | 0.475   |
| G1 + G2                        | 63                   | 61   | 0.511          |         |
| G3 + G4                        | 23                   | 27   |                |         |
| TNM stage                      |                      |      |                | 0.688   |
| I+II                           | 82                   | 84   | 0.161          |         |
| III+ IV                        | 4                    | 3    |                |         |
| Number of positive lymph nodes |                      |      |                | 0.364   |
| <5                             | 64                   | 72   | 0.822          |         |
| $\geq 5$                       | 20                   | 16   |                |         |

**Table SVII. Mass spectrometric analysis of the main proteins pulled down by linc01614.**

| Accession   | Protein name     | Gene   | Description                                                                                                    | Mw (kDa) | iBAQ     | iBAQ (%)     |
|-------------|------------------|--------|----------------------------------------------------------------------------------------------------------------|----------|----------|--------------|
| A0A2R8YGF8  | A0A2R8YGF8_HUMAN | ACTB   | Actin, cytoplasmic 1 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=ACTB PE=1 SV=1                              | 18.089   | 24692000 | 27.926171536 |
| CON__P35908 |                  | KRT2   | SWISS-PROT: P35908 Tax_Id=9606 Gene_Symbol=KRT2 Keratin, type II cytoskeletal 2 epidermal                      | 65.865   | 10194000 | 11.529215642 |
| P49841      | GSK3B_HUMAN      | GSK3B  | Glycogen synthase kinase-3 beta OS= <i>Homo sapiens</i> OX=9606 GN=GSK3B PE=1 SV=2                             | 46.744   | 9907300  | 11.204963521 |
| M0R1V7      | M0R1V7_HUMAN     | UBA52  | Ubiquitin-60S ribosomal protein L40 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=UBA52 PE=1 SV=1              | 7.132    | 6659200  | 7.531425623  |
| P06733      | ENOA_HUMAN       | ENO1   | Alpha-enolase OS= <i>Homo sapiens</i> OX=9606 GN=ENO1 PE=1 SV=2                                                | 47.169   | 6218400  | 7.0328894    |
| P02533      | K1C14_HUMAN      | KRT14  | Keratin, type I cytoskeletal 14 OS= <i>Homo sapiens</i> OX=9606 GN=KRT14 PE=1 SV=4                             | 51.561   | 5285000  | 5.977232163  |
| F8VZY9      | F8VZY9_HUMAN     | KRT18  | Keratin, type I cytoskeletal 18 OS= <i>Homo sapiens</i> OX=9606 GN=KRT18 PE=1 SV=1                             | 43.774   | 3848100  | 4.352126222  |
| P13647      | K2C5_HUMAN       | KRT5   | Keratin, type II cytoskeletal 5 OS= <i>Homo sapiens</i> OX=9606 GN=KRT5 PE=1 SV=3                              | 62.378   | 3529200  | 3.991456528  |
| D6RF44      | D6RF44_HUMAN     | HNRNPD | Heterogeneous nuclear ribonucleoprotein D0 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=HNRNPD PE=1 SV=8      | 12.553   | 2144900  | 2.425840164  |
| P26641      | EF1G_HUMAN       | EEF1G  | Elongation factor 1-gamma OS= <i>Homo sapiens</i> OX=9606 GN=EEF1G PE=1 SV=3                                   | 50.119   | 1475800  | 1.669101083  |
| F5H3R9      | F5H3R9_HUMAN     | ATP8B3 | Phospholipid-transporting ATPase IK OS= <i>Homo sapiens</i> OX=9606 GN=ATP8B3 PE=1 SV=1                        | 64.028   | 1316900  | 1.489388275  |
| Q5VSP4      | LC1L1_HUMAN      | LCN1P1 | Putative lipocalin 1-like protein 1 OS= <i>Homo sapiens</i> OX=9606 GN=LCN1P1 PE=5 SV=1                        | 17.918   | 1136400  | 1.285246288  |
| K7EM39      | K7EM39_HUMAN     | ARL5C  | Putative ADP-ribosylation factor-like protein 5C (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=ARL5C PE=4 SV=1 | 11.126   | 1128800  | 1.276650835  |
| F8VP67      | F8VP67_HUMAN     | KRT8   | Keratin, type II cytoskeletal 8 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=KRT8 PE=1 SV=1                   | 13.588   | 990550   | 1.120292776  |
| P08779      | K1C16_HUMAN      | KRT16  | Keratin, type I cytoskeletal 16 OS= <i>Homo sapiens</i> OX=9606 GN=KRT16 PE=1 SV=4                             | 51.268   | 928390   | 1.049991025  |
| P49411      | EFTU_HUMAN       | TUFM   | Elongation factor Tu, mitochondrial OS= <i>Homo sapiens</i> OX=9606 GN=TUFM PE=1 SV=2                          | 49.542   | 925800   | 1.047061786  |
| O95678      | K2C75_HUMAN      | KRT75  | Keratin, type II cytoskeletal 75 OS= <i>Homo sapiens</i> OX=9606 GN=KRT75 PE=1 SV=2                            | 59.56    | 925480   | 1.046699872  |
| C9JTK6      | C9JTK6_HUMAN     | OLA1   | Obg-like ATPase 1 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=OLA1 PE=1 SV=1                                 | 12.302   | 919350   | 1.039766961  |
| K7EM38      | K7EM38_HUMAN     | ACTG1  | Actin, cytoplasmic 2 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=ACTG1 PE=1 SV=1                             | 14.522   | 696330   | 0.787535681  |
| K7EMN2      | K7EMN2_HUMAN     | PGD    | 6-Phosphogluconate dehydrogenase, decarboxylating (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=PGD PE=1 SV=1  | 17.293   | 689330   | 0.779618817  |

|             |                  |         |                                                                                                                          |         |        |             |
|-------------|------------------|---------|--------------------------------------------------------------------------------------------------------------------------|---------|--------|-------------|
| CON__Q9QWL7 |                  | Krt17   | SWISS-PROT: Q9QWL7 Tax_Id=10090 Gene_Symbol=Krt17 Keratin, type I cytoskeletal 17                                        | 48.162  | 630810 | 0.713433836 |
| F8W9Z8      | F8W9Z8_HUMAN     | HLA-C   | HLA class I histocompatibility antigen, C alpha chain OS= <i>Homo sapiens</i> OX=9606 GN=HLA-C PE=1 SV=1                 | 15.088  | 605930 | 0.68529504  |
| P02675      | FIBB_HUMAN       | FGB     | Fibrinogen beta chain OS= <i>Homo sapiens</i> OX=9606 GN=FGB PE=1 SV=2                                                   | 55.928  | 462580 | 0.523168979 |
| Q96GN5      | CDA7L_HUMAN      | CDCA7L  | Cell division cycle-associated 7-like protein OS= <i>Homo sapiens</i> OX=9606 GN=CDCA7L PE=1 SV=2                        | 52.206  | 443090 | 0.501126168 |
| J3QQM1      | J3QQM1_HUMAN     | PSMC5   | 26S proteasome regulatory subunit 8 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=PSMC5 PE=1 SV=1                        | 29.347  | 424050 | 0.479592299 |
| E7EQG2      | E7EQG2_HUMAN     | EIF4A2  | RNA helicase OS= <i>Homo sapiens</i> OX=9606 GN=EIF4A2 PE=1 SV=1                                                         | 41.29   | 267890 | 0.302978377 |
| Q5SX91      | Q5SX91_HUMAN     | GDI2    | Rab GDP dissociation inhibitor (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=GDI2 PE=1 SV=1                              | 23.115  | 238060 | 0.269241228 |
| F8WC23      | F8WC23_HUMAN     | PAXIP1  | PAX-interacting protein 1 OS= <i>Homo sapiens</i> OX=9606 GN=PAXIP1 PE=1 SV=1                                            | 16.029  | 201950 | 0.22840152  |
| CON__P02769 |                  |         | SWISS-PROT:P02769 ( <i>Bos taurus</i> ) Bovine serum albumin precursor                                                   | 69.293  | 198590 | 0.224601426 |
| Q5TA58      | Q5TA58_HUMAN     | AGO1    | Protein argonaute-1 OS= <i>Homo sapiens</i> OX=9606 GN=AGO1 PE=1 SV=1                                                    | 88.879  | 176910 | 0.200081768 |
| Q86YZ3      | HORN_HUMAN       | HRNR    | Hornerin OS= <i>Homo sapiens</i> OX=9606 GN=HRNR PE=1 SV=2                                                               | 282.39  | 172380 | 0.194958426 |
| O75380      | NDUS6_HUMAN      | NDUFS6  | NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial OS= <i>Homo sapiens</i> OX=9606 GN=NDUFS6 PE=1 SV=1 | 13.712  | 139680 | 0.157975362 |
| Q6P1R3      | MSD2_HUMAN       | MSANTD2 | Myb/SANT-like DNA-binding domain-containing protein 2 OS= <i>Homo sapiens</i> OX=9606 GN=MSANTD2 PE=1 SV=1               | 61.319  | 83032  | 0.093907576 |
| Q49AM6      | Q49AM6_HUMAN     | COL4A5  | COL4A5 protein OS= <i>Homo sapiens</i> OX=9606 GN=COL4A5 PE=1 SV=1                                                       | 64.324  | 68406  | 0.077365855 |
| H7BY35      | H7BY35_HUMAN     | RYR2    | Ryanodine receptor 2 OS= <i>Homo sapiens</i> OX=9606 GN=RYR2 PE=1 SV=2                                                   | 562.61  | 66691  | 0.075426223 |
| A0A087WTJ8  | A0A087WTJ8_HUMAN | TTC25   | Tetratricopeptide repeat protein 25 OS= <i>Homo sapiens</i> OX=9606 GN=TTC25 PE=1 SV=1                                   | 43.539  | 66627  | 0.075353841 |
| A2A341      | A2A341_HUMAN     | SYCP2   | Synaptonemal complex protein 2 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=SYCP2 PE=1 SV=1                             | 116.534 | 64379  | 0.072811396 |
| A0A0C4DH56  | A0A0C4DH56_HUMAN | PAPOLG  | Poly(A) polymerase gamma (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=PAPOLG PE=1 SV=1                                  | 42.315  | 62458  | 0.070638783 |
| Q9NYA3      | GOG6A_HUMAN      | GOLGA6A | Golgin subfamily A member 6A OS= <i>Homo sapiens</i> OX=9606 GN=GOLGA6A PE=1 SV=3                                        | 79.946  | 61839  | 0.069938706 |
| Q6ZN44      | UNC5A_HUMAN      | UNC5A   | Netrin receptor UNC5A OS= <i>Homo sapiens</i> OX=9606 GN=UNC5A PE=1 SV=3                                                 | 92.932  | 60275  | 0.068169852 |

|            |                  |         |                                                                                                       |         |       |             |
|------------|------------------|---------|-------------------------------------------------------------------------------------------------------|---------|-------|-------------|
| Q9NRW4     | DUS22_HUMAN      | DUSP22  | Dual specificity protein phosphatase 22 OS= <i>Homo sapiens</i> OX=9606 GN=DUSP22 PE=1 SV=1           | 20.91   | 47889 | 0.054161527 |
| Q9UKE5     | TNIK_HUMAN       | TNIK    | TRAF2 and NCK-interacting protein kinase OS= <i>Homo sapiens</i> OX=9606 GN=TNIK PE=1 SV=1            | 154.943 | 43906 | 0.049656832 |
| Q96B21     | TM45B_HUMAN      | TMEM45B | Transmembrane protein 45B OS= <i>Homo sapiens</i> OX=9606 GN=TMEM45B PE=1 SV=1                        | 31.826  | 33049 | 0.037377776 |
| E5RHR8     | E5RHR8_HUMAN     | SGK3    | Serine/threonine-protein kinase Sgk3 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=SGK3 PE=1 SV=1     | 14.407  | 32608 | 0.036879014 |
| Q86SR1     | GLT10_HUMAN      | GALNT10 | Polypeptide N-acetylgalactosaminyltransferase 10 OS= <i>Homo sapiens</i> OX=9606 GN=GALNT10 PE=1 SV=2 | 68.992  | 25816 | 0.029197394 |
| Q5SZ59     | Q5SZ59_HUMAN     | OTUD7B  | Ubiquitinyl hydrolase 1 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=OTUD7B PE=1 SV=1                | 47.599  | 23335 | 0.026391431 |
| O00370     | LORF2_HUMAN      |         | LINE-1 retrotransposable element ORF2 protein OS= <i>Homo sapiens</i> OX=9606 PE=1 SV=1               | 149.012 | 20120 | 0.022755328 |
| Q8IYB4     | PEX5R_HUMAN      | PEX5L   | PEX5-related protein OS= <i>Homo sapiens</i> OX=9606 GN=PEX5L PE=1 SV=2                               | 69.697  | 19930 | 0.022540442 |
| A0A0A0MRE6 | A0A0A0MRE6_HUMAN | WDR47   | WD repeat-containing protein 47 OS= <i>Homo sapiens</i> OX=9606 GN=WDR47 PE=1 SV=1                    | 98.702  | 18668 | 0.021113145 |
| A0A3B3IRP6 | A0A3B3IRP6_HUMAN | HERC2   | E3 ubiquitin-protein ligase HERC2 (Fragment) OS= <i>Homo sapiens</i> OX=9606 GN=HERC2 PE=1 SV=1       | 156.277 | 16492 | 0.018652131 |
| P17027     | ZNF23_HUMAN      | ZNF23   | Zinc finger protein 23 OS= <i>Homo sapiens</i> OX=9606 GN=ZNF23 PE=1 SV=3                             | 73.059  | 15846 | 0.017921518 |
| Q9NVE5     | UBP40_HUMAN      | USP40   | Ubiquitin carboxyl-terminal hydrolase 40 OS= <i>Homo sapiens</i> OX=9606 GN=USP40 PE=1 SV=3           | 140.13  | 14335 | 0.016212606 |