

**SUPPLEMENTARY FIGURES**

|                             |              |
|-----------------------------|--------------|
| Sample size                 | 605          |
| Positive group <sup>a</sup> | 533 (88.10%) |
| Negative group <sup>b</sup> | 72 (11.90%)  |

<sup>a</sup> 0\_normal = 1

<sup>b</sup> 0\_normal = 0

|                        |         |
|------------------------|---------|
| Disease prevalence (%) | unknown |
|------------------------|---------|

**Area under the ROC curve (AUC)**

|                                      |                |
|--------------------------------------|----------------|
| Area under the ROC curve (AUC)       | 0.868          |
| Standard Error <sup>a</sup>          | 0.0192         |
| 95% Confidence interval <sup>b</sup> | 0.838 to 0.894 |
| z statistic                          | 19.169         |
| Significance level P (Area=0.5)      | <0.0001        |

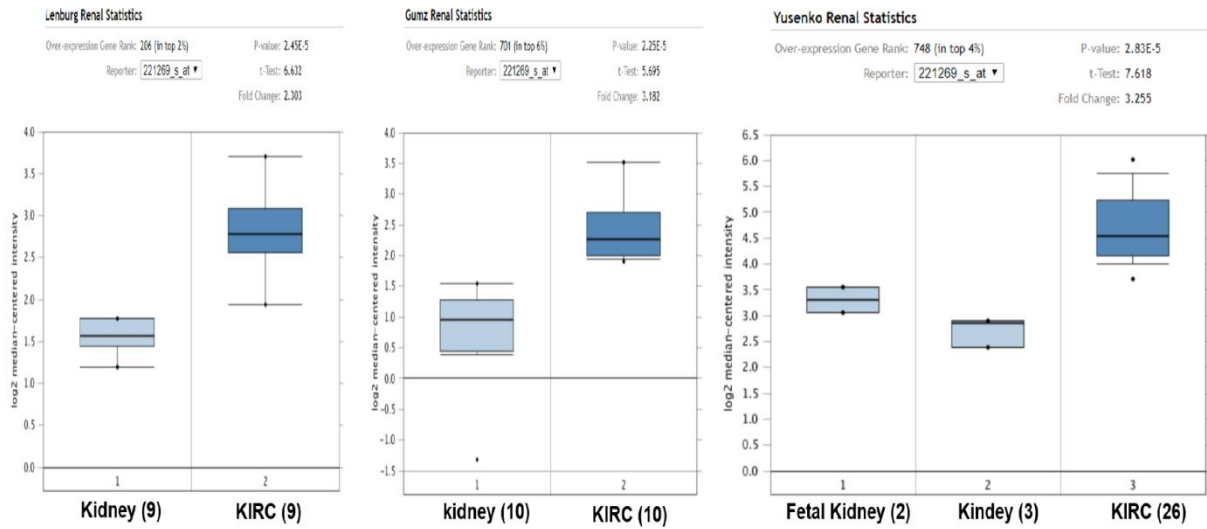
<sup>a</sup> DeLong et al., 1988

<sup>b</sup> Binomial exact

**Youden index**

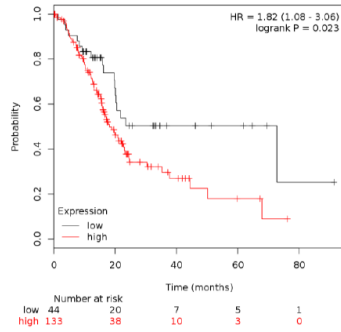
|                      |          |
|----------------------|----------|
| Youden index J       | 0.6022   |
| Associated criterion | >10.9543 |
| Sensitivity          | 81.05    |
| Specificity          | 79.17    |

**Supplementary Figure 1. The detailed process of ROC calculation with KIRC happened or not.**

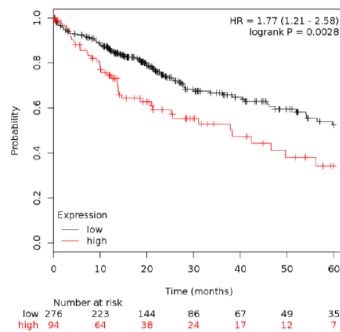


**Supplementary Figure 2. Three data-group from Oncomine database indicate TIP-B1 upregulated in KIRC tumor.**

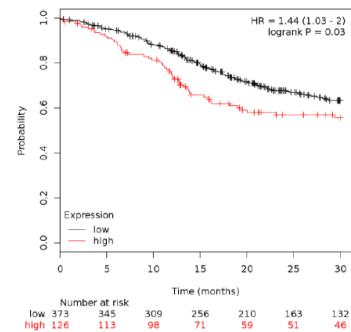
### Pancreatic ductal adenocarcinoma



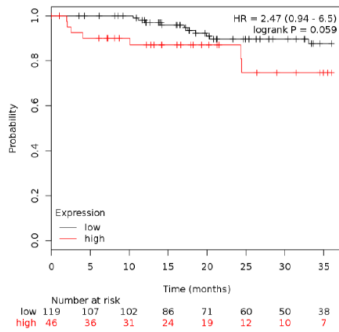
### Liver hepatocellular carcinoma



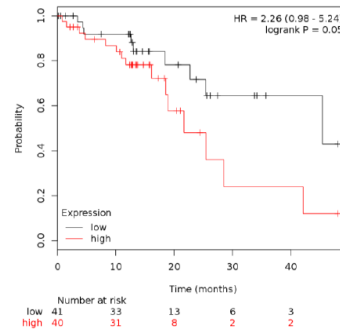
### Head-neck squamous cell carcinoma



### Rectum adenocarcinoma



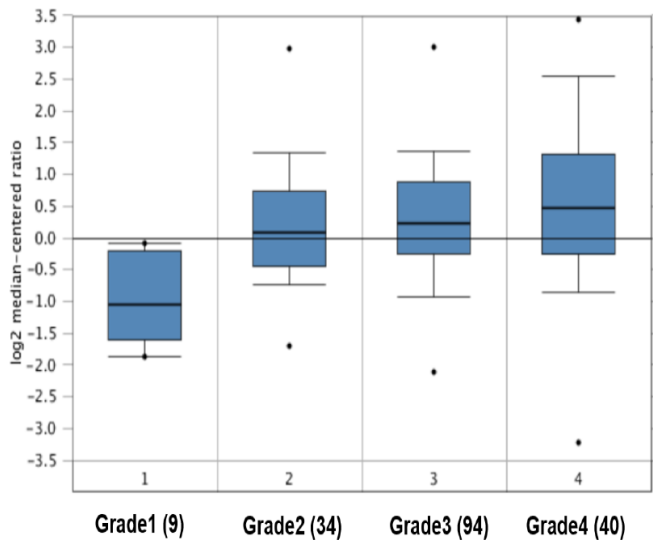
### Esophageal Squamous Cell Carcinoma



Supplementary Figure 3. High TIP-B1 indicate poor prognosis in many human cancers.

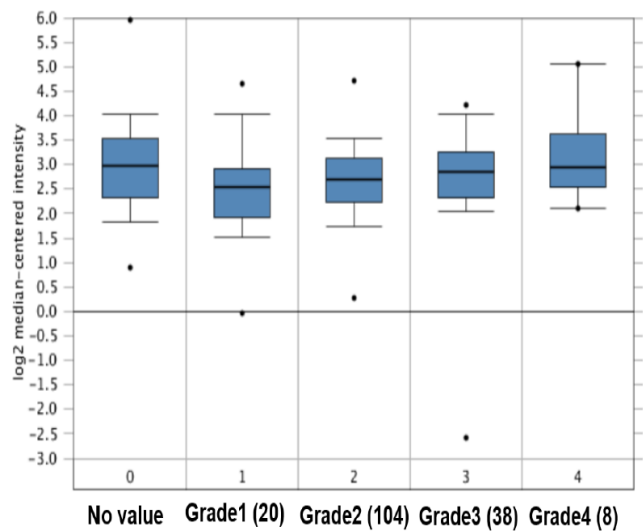
### Zhao Renal Statistics

Reporter:

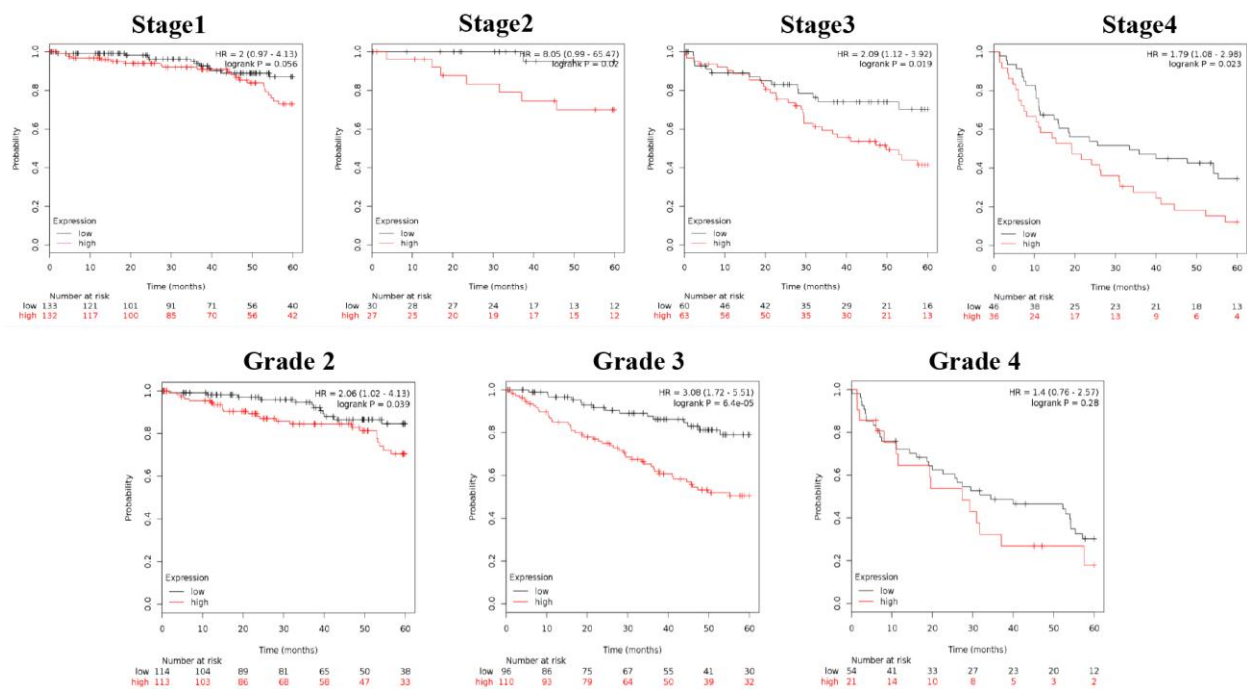


### Bittner Renal Statistics

Reporter:



Supplementary Figure 4. The TIP-B1 expression significantly increased step by step in OncoPrint database.



Supplementary Figure 5. High expression of TIP-B1 in each risk stage and grade have worse OS rate.

|                             |              |
|-----------------------------|--------------|
| Sample size                 | 533          |
| Positive group <sup>a</sup> | 359 (67.35%) |
| Negative group <sup>b</sup> | 174 (32.65%) |

<sup>a</sup> diagnosis = 1  
<sup>b</sup> diagnosis = 0

|                        |         |
|------------------------|---------|
| Disease prevalence (%) | unknown |
|------------------------|---------|

**Area under the ROC curve (AUC)**

|                                      |                |
|--------------------------------------|----------------|
| Area under the ROC curve (AUC)       | 0.695          |
| Standard Error <sup>a</sup>          | 0.0244         |
| 95% Confidence interval <sup>b</sup> | 0.654 to 0.734 |
| z statistic                          | 7.990          |
| Significance level P (Area=0.5)      | <0.0001        |

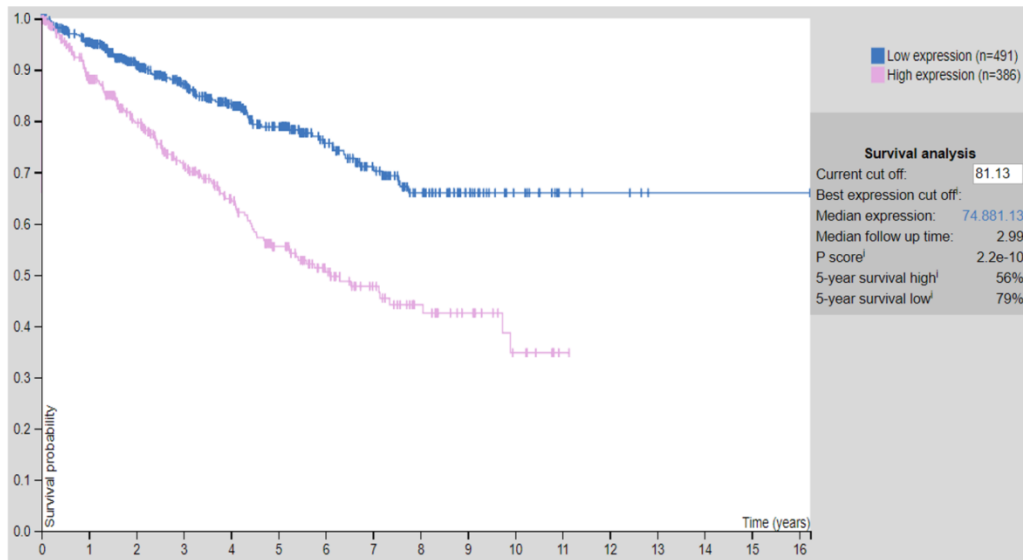
<sup>a</sup> DeLong et al., 1988

<sup>b</sup> Binomial exact

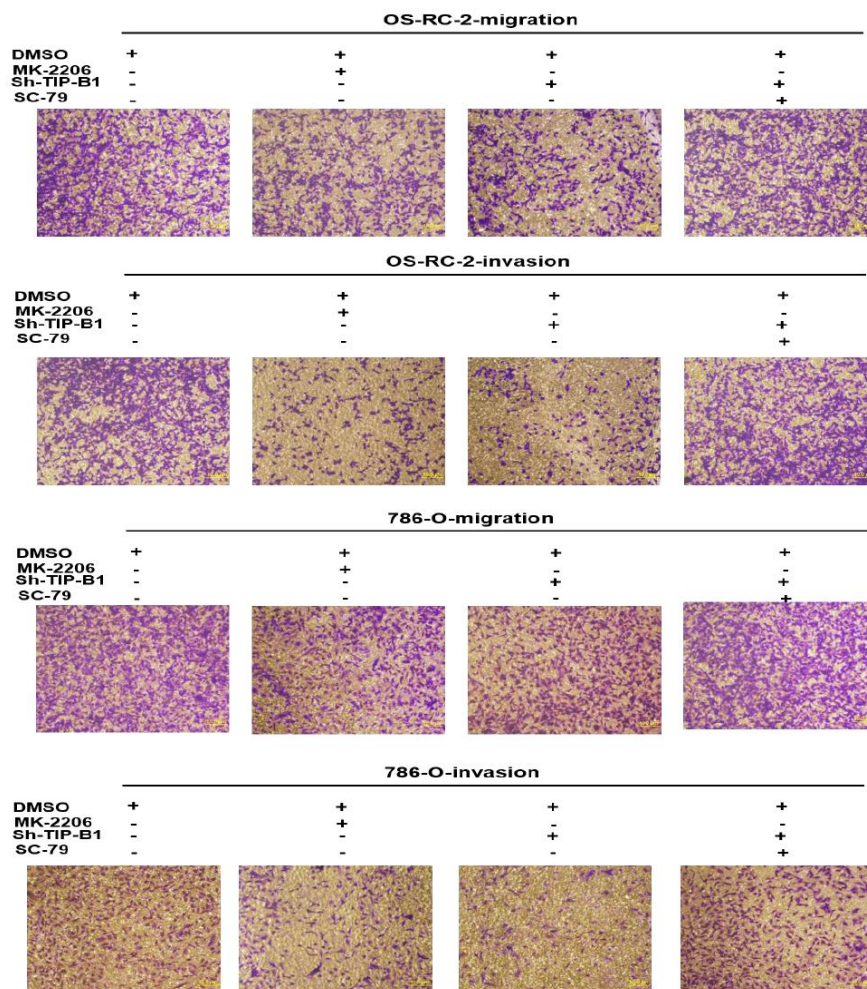
**Youden index**

|                      |         |
|----------------------|---------|
| Youden index J       | 0.3106  |
| Associated criterion | ≤11.767 |
| Sensitivity          | 71.87   |
| Specificity          | 59.20   |

Supplementary Figure 6. ROC analysis to calculate the optimal cut-off value of TIP-B1 associated with KIRC patients survival or not.



Supplementary Figure 7. The over survival of TIP-B1 in RCC from Human Protein Atlas website



Supplementary Figure 8. The rescue experiments of transwell assay.