Supplementary figures and supplementary tables:

**Supplementary Figure S1.** (A) IF assay were performed to detect the expression of EMT markers in CSRP2-overexpressed or -depleted CRC cells and control cells. (B) The statistics of IF intensity of figure 4B and figure S1A using image J software. the
unit is Arbitrary Units (AU). (C) Interaction between CSRP2 and p130Cas was confirmed by IF assay with Z-stack. Using co-location scatter diagram and PCC to analyze co-location (PCC: Pearson correlation coefficient). (D) IF assays analyzed the protein expression of p130Cas and p-p130Cas in CSRP2-overexpressed or -depleted CRC cells and control cells. (E) The statistics of IF intensity of figure S1D using image J software, the unit is Arbitrary Units (AU).
**Supplementary Figure S2.** (A) WB was performed to detect the protein changes of p130Cas, p-p130Cas and EMT marker in 12 pairs of fresh colorectal cancer tissues. (B) WB was performed to detect the protein changes of p130Cas and p-p130Cas after treating with dasatinib on shCSRP2 cell line. (C) Transwell invasion assay was used to detect the changes of cell invasion ability after treating with dasatinib in shCSRP2 cell line. (D) The Figure shows the statistical analysis of the fluorescence intensity of Figure 6D. (E) The Figure shows the statistical analysis of the fluorescence intensity of Figure 7C. The unit is Arbitrary Units (AU).
**Supplementary Table S1.** The Relationship between CSRP2 expression and clinic pathological features

| Characteristics         | CSRP2 expression | x2 value | P value |
|-------------------------|------------------|----------|---------|
|                         | n=215            | Low (67.4%) | High (35.6%) |
| **Gender**              |                  |           |         |
| Male                    | 124              | 84       | 40      |
| Female                  | 91               | 61       | 30      |
| **Age (years)**         |                  |           |         |
| ≤50                     | 49               | 31       | 18      |
| >50                     | 166              | 114      | 52      |
| **Tumor site**          |                  |           |         |
| colon                   | 142              | 92       | 50      |
| Rectum                  | 73               | 53       | 20      |
| **Tumor size**          |                  |           |         |
| <5cm                    | 112              | 74       | 38      |
| ≥5cm                    | 103              | 71       | 32      |
| **Differentiation**     |                  |           |         |
| Well                    | 13               | 10       | 3       |
| Moderate                | 150              | 97       | 53      |
| Poor                    | 52               | 38       | 14      |
| **T stage**             |                  |           |         |
| T1-2                    | 18               | 12       | 6       |
| T3-4                    | 197              | 133      | 64      |
| **Lymph node status**   |                  |           |         |
| Positive                | 103              | 92       | 11      |
| Negative                | 112              | 53       | 59      |
| **Distant metastasis**  |                  |           |         |
| Yes                     | 22               | 19       | 3       |
| No                      | 193              | 126      | 67      |
| **Vascular invasion**   |                  |           |         |
| Positive                | 58               | 45       | 13      |
| Negative                | 157              | 100      | 57      |
| **Clinical stage**      |                  |           |         |
| I + II stage            | 108              | 51       | 57      |
| III + IV stage          | 107              | 94       | 13      |
**Supplementary Table S2.** Spearman correlation analysis between the expression levels of CSRP2 and Clinic pathologic Features

| Variables            | CSRP2 expression | Spearman correlation | P value |
|----------------------|-------------------|-----------------------|---------|
| Gender               |                   | 0.007                 | 0.913   |
| Age                  |                   | -0.048                | 0.48    |
| Tumor size           |                   | -0.03                 | 0.657   |
| Differentiation      |                   | -0.039                | 0.571   |
| Lymph node status    |                   | -0.427                | 0       |
| Distant metastasis   |                   | -0.136                | 0.046   |
| Clinical stage       |                   | -0.392                | 0       |
**Supplementary Table S3.** The Relationship between CSRP2 expression and clinic pathological features

| Characteristics               | n=215 | CSRP2 expression | x² value | P value |
|------------------------------|-------|------------------|----------|---------|
| Tumor size (I + II stage)    |       |                  |          |         |
| <5cm                         | 54    | Low              | 25       | 29      | 4.558   | 0.026   |
| ≥5cm                         | 54    | High             | 36       | 18      |         |         |
| Tumor size (III + IV stage)  |       |                  |          |         |
| <5cm                         | 58    | Low              | 49       | 9       | 2.682   | 0.081   |
| ≥5cm                         | 49    | High             | 35       | 14      |         |         |