**Supplementary File 1**

|  |  |  |
| --- | --- | --- |
|  | Scrambled-shRNA (%) | sh-DIAPH3 (%) |
| Abnormal cell division | 4.2 | 81.7 |
| (1) defect in chromosome alignment: lagging  chromosomes and/or asymmetric metaphase plate | 4.2 | 57.4 |
| (2) abnormal astral microtubule | 0.0 | 52.2 |
| (3) abnormal number of centrosomes | 0.0 | 40.0 |
| (4) abnormal mitotic spindle | 0.0 | 53.0 |
| (5) mis-localization of SPAG5 | 0.0 | 60.0 |