**Supplementary Table S5**. Average number of reads mapped in 1 Mb bin of each arm of wheat chromosomes in CS 5D monosomic line samples: TA3059-CSM5D-2020-1846-114 and TA3059-CSM5D-2020-1846-102. The centromere positions are based on IWGCS Refseq v1 and used to determine short and long arms with positions provided in the bash script.

|  |  |  |  |
| --- | --- | --- | --- |
| Sample | Chromosome | Short Arm Read Count  | Long Arm Read Count  |
| TA3059-CSM5D-2020-1846-114 (DNA200317P02\_C03) | 1A  | 22.7  | 22.3 |
| 1B | 22.2 | 21.7 |
| 1D | 21.7 | 21.8 |
| 2A | 22.1 | 22.2 |
| 2B | 21.9 | 21.7 |
| 2D | 21.7 | 20.9 |
| 3A | 21.5 | 21.4 |
| 3B | 22.2 | 22.1 |
| 3D | 20.9 | 20.8 |
| 4A | 22.2 | 21.5 |
| 4B | 21.5 | 21.6 |
| 4D | 22.1 | 21.2 |
| 5A | 21.7 | 22.1 |
| 5B | 22.2 | 22.5 |
| **5D** | **0.32** | **10.6** |
| 6A | 22.1 | 22.1 |
| 6B | 21.3 | 21.3 |
| 6D | 20.8 | 21.1 |
| 7A | 21.8 | 21.7 |
| 7B | 21.8 | 21.2 |
| 7D | 21.6 | 21.6 |
| 7D | 21.6 | 21.6 |
|  |  |  |  |
| TA3059-CSM5D-2020-1846-102(DNA200317P02\_G01) | 1A | 30.1 | 29.9 |
| 1B | 29.6 | 30.8 |
| 1D | 29.7 | 29.2 |
| 2A | 29.6 | 30.2 |
| 2B | 30.8 | 29.9 |
| 2D | 29.7 | 29.9 |
| 3A | 30.7 | 29.5 |
| 3B | 30.9 | 29.9 |
| 3D | 29.7 | 30.1 |
| 4A | 29.7 | 30.1 |
| 4B | 30.1 | 30.3 |
| 4D | 30 | 28.7 |
| 5A | 31.2 | 29.9 |
| 5B | 29.5 | 29.8 |
| **5D** | **15.1** | **29.5** |
| 6A | 30.6 | 30.7 |
| 6B | 31.1 | 30.5 |
| 6D | 29.1 | 29.7 |
| 7A | 29.9 | 30 |
| 7B | 30.1 | 30.1 |
| 7D | 29.5 | 30.2 |