**S6 Table.** The mean GC content per 100,000 bases found for each Giemsa staining category for all chromosomes. The categories gneg (lightest), gpos25, gpos50, gpos75, and gpos100 (darkest) refer to the level of staining achieved. The gvar category refers to areas that tend to be heterochromatic. The acen category refers to centromeric regions. The stalk category refers to the short arm of acrocentric chromosomes. The number of guanine and cytosine bases were counted on the hg38 reference assembly and thus the values are for one DNA strand. Densities would be the same on the second strand.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|   | Mean GC Content per 100,000 bases |
| Chromo-some | gneg  | gpos25 | gpos50 | gpos75 | gpos100 | gvar | acen | stalk |
| 1 | 20,846.16 | 23,248.02 | 20,625.62 | 18,149.34 | 16,443.09 | 107.88 | 329.09 | n/a |
| 2 | 20,951.04 | 21,157.76 | 20,638.09 | 18,461.11 | 18,679.47 | n/a | 9,730.64 | n/a |
| 3 | 20,328.34 | 19,720.94 | 18,735.08 | 18,121.35 | 16,335.31 | 15,297.78 | 7,627.98 | n/a |
| 4 | 18,546.08 | 18,569.76 | 17,003.44 | 16,776.99 | 16,338.65 | n/a | 5,232.17 | n/a |
| 5 | 19,455.39 | 21,193.29 | 18,378.29 | 18,575.66 | 16,562.35 | n/a | 4,090.16 | n/a |
| 6 | 20,315.30 | 22,518.71 | 18,641.11 | 17,946.43 | 17,082.29 | n/a | 5,489.62 | n/a |
| 7 | 21,231.03 | 21,648.11 | 19,968.57 | 18,543.83 | 17,999.05 | n/a | 1,440.03 | n/a |
| 8 | 20,674.08 | 15,950.57 | 18,567.85 | 18,810.61 | 17,245.64 | n/a | 3,369.38 | n/a |
| 9 | 20,921.23 | 22,666.49 | 18,175.36 | 18,621.93 | 16,624.03 | 647.94 | 9,770.69 | n/a |
| 10 | 22,798.98 | 23,220.84 | 20,374.58 | 19,366 | 17,330.29 | n/a | 4,036.58 | n/a |
| 11 | 22,996.91 | 21,158.71 | 21,637.82 | 15,851.11 | 16,498.97 | n/a | 2,174.96 | n/a |
| 12 | 20,125.22 | 20,643.18 | 19,769.24 | 16,818 | 17,114.70 | n/a | 4,092.24 | n/a |
| 13 | 20,097.59 | 19,920.89 | 18,352.37 | 16,456.02 | 18,189.42 | 0.12 | 5,682.58 | 0 |
| 14 | 20,941.93 | 20,882.13 | 21,049.36 | 18,598.47 | 17,323.93 | 61.8 | 40.2 | 0 |
| 15 | 21,546.08 | 21,019.05 | 21,574.56 | 19,501.09 | n/a | 0.13 | 3,980.07 | 0 |
| 16 | 24,426 | 33,522.65 | 19,507.15 | 20,541.92 | 19,544.23 | 1,333.09 | 4,021.93 | n/a |
| 17 | 24,358.16 | 24,138.23 | 22,276.12 | 19,372.36 | n/a | n/a | 2,286.68 | n/a |
| 18 | 21,394.78 | 21,325.68 | 19,441.98 | 20,203.35 | 17,562.75 | n/a | 1,455.14 | n/a |
| 19 | 22,442.56 | 20,375.99 | n/a | n/a | n/a | 18,092.71 | 1,801.52 | n/a |
| 20 | 22,596.22 | 19,715.54 | 27,317.89 | 19,859.99 | n/a | n/a | 5,473.62 | n/a |
| 21 | 21,582.74 | n/a | 23,154.16 | 18,451.02 | 16,583.58 | 5,774.06 | 3.72 | 8,251.18 |
| 22 | 27,426.62 | 24,938 | 25,162.94 | n/a | n/a | 2,579.93 | 7,258.94 | 0 |
| X | 15,630.63 | 16,319.49 | 15,943.50 | 14,112.34 | 12,232.62 | n/a | 1,250.55 | n/a |
| Y | 14,644.19 | n/a | 17,749.43 | n/a | n/a | 173.67 | 0.5 | n/a |
| Mean (SD) | 21,094.89 (2613.31) | 21,538.82 (3448.67) | 20,175.85 (2585.86) | 18,244.71 (1533.20) | 16,982.80 (1475.02) | 4,006.28 (6534.93) | 3,776.62 (2879.41) | 1,650.24 (3690.04) |
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