

Table 1. Content of 5me-Deoxycytidine (5-meC) in DNA Preparations of Ten Species and the Estimated Average Numbers of SmdC per (Haploid) Genome of *A. thaliana*, *M. musculus*, *D. melanogaster*, *E. coli*, *S. cerevisiae*, *S. boulardii*, *S. paradoxus*, *P. pastoris*, and *S. pombe*^a

species	genome size MB	% methylation	Est. no. SmdC per MB	Est. no. SmdC/genome
<i>A. thaliana</i>	119.7	14 ± 1.5	5.0 × 10 ⁴	6.0 × 10 ⁶
<i>M. musculus</i>	2800	7.6 ± 0.8	3.2 × 10 ⁴	8.9 × 10 ⁷
<i>D. melanogaster</i>	139.5	0.034 ± 0.013	1.4 × 10 ²	2 × 10 ⁴
<i>E. coli</i> DH5α	4.6	2.3 ± 0.1	1.2 × 10 ⁴	5.4 × 10 ⁴
<i>E. coli</i> GM2929 (<i>dcm-6</i>)	4.6	0.016 ± 0.002	81	3.8 × 10 ²
<i>S. cerevisiae</i> BY4741**	12.5	not detected (<0.002)	not detected (LOD = 8)	not detected (LOD = 96)
<i>S. cerevisiae</i> D27–310B**	12.5 (b.f.)	not detected	not detected	not detected
<i>S. cerevisiae</i> AWRI 796**	12.5 (b.f.)	not detected	not detected	not detected
<i>S. cerevisiae</i> SCHD0308	12.5 (b.f.)	not detected	not detected	not detected
<i>S. cerevisiae</i> SaflagerW-34/70	12.5 (b.f.)	not detected	not detected	not detected
<i>S. boulardii</i> CBS 5926	11.4	not detected	not detected	not detected
<i>S. paradoxus</i> KPN3829	11.8	not detected	not detected	not detected
<i>S. pombe</i> 972h-	13.8	not detected	not detected	not detected
<i>P. pastoris</i> SMD1168	9.4	not detected	not detected	not detected

^aTotal SmdC per genome and MB average estimations were calculated based on genome size and GC content.^{29–35} n = 3 from biological triplicates, (***) analysis of stationary, and exponential cultures yielded the same result. b.f. = bona fide. Est. = estimated.

- (29) Milo, R.; Jorgensen, P.; Moran, U.; Weber, G.; Springer, M. *Nucleic Acids Res.* **2010**, *38*, D750–3.
- (30) Keightley, P. D.; Trivedi, U.; Thomson, M.; Oliver, F.; Kumar, S.; Blaxter, M. L. *Genome Res.* **2009**, *19*, 1195–1201.
- (31) Matecic, M.; Stuart, S.; Holmes, S. G. *Genetics* **2002**, *162*, 973–976.
- (32) Kellis, M.; Patterson, N.; Endrizzi, M.; Birren, B.; Lander, E. S. *Nature* **2003**, *423*, 241–254.
- (33) Khatri, I.; Akhtar, A.; Kaur, K.; Tomar, R.; Prasad, G. S.; Ramya, T. N. C.; Subramanian, S. *Gut Pathog.* **2013**, *5*, 30.
- (34) De Schutter, K.; Lin, Y.-C.; Tiels, P.; Van Hecke, A.; Glinka, S.; Weber-Lehmann, J.; Rouzé, P.; Van de Peer, Y.; Callewaert, N. *Nat. Biotechnol.* **2009**, *27*, 561–566.
- (35) Wood, V.; Gwilliam, R.; Rajandream, M.-A.; Lyne, M.; Lyne, R.; Stewart, A.; Sgouros, J.; Peat, N.; Hayles, J.; Baker, S.; Basham, D.; Bowman, S.; Brooks, K.; Brown, D.; Brown, S.; Chillingworth, T.; Churcher, C.; Collins, M.; Connor, R.; Cronin, A.; Davis, P.; Feltwell, T.; Fraser, A.; Gentles, S.; Goble, A.; Hamlin, N.; Harris, D.; Hidalgo, J.; Hodgson, G.; Holroyd, S.; Hornsby, T.; Howarth, S.; Huckle, E. J.; Hunt, S.; Jagels, K.; James, K.; Jones, L.; Jones, M.; Leather, S.; McDonald, S.; McLean, J.; Mooney, P.; Moule, S.; Mungall, K.; Murphy, L.; Niblett, D.; Odell, C.; Oliver, K.; O’Neil, S.; Pearson, D.; Quail, M. A.; Rabinowitsch, E.; Rutherford, K.; Rutter, S.; Saunders, D.; Seeger, K.; Sharp, S.; Skelton, J.; Simmonds, M.; Squares, R.; Squares, S.; Stevens, K.; Taylor, K.; Taylor, R. G.; Tivey, A.; Walsh, S.; Warren, T.; Whitehead, S.; Woodward, J.; Volckaert, G.; Aert, R.; Robben, J.; Grymonprez, B.; Weltjens, I.; Vanstreels, E.; Rieger, M.; Schäfer, M.; Müller-Auer, S.; Gabel, C.; Fuchs, M.; Düsterhöft, A.; Fritz, C.; Holzer, E.; Moestl, D.; Hilbert, H.; Borzym, K.; Langer, L.; Beck, A.; Lehrach, H.; Reinhardt, R.; Pohl, T. M.; Eger, P.; Zimmermann, W.; Wedler, H.; Wambutt, R.; Purnelle, B.; Goffeau, A.; Cadieu, E.; Dréano, S.; Gloux, S.; Lelaure, V.; Mottier, S.; Galibert, F.; Aves, S. J.; Xiang, Z.; Hunt, C.; Moore, K.; Hurst, S. M.; Lucas, M.; Rochet, M.; Gaillardin, C.; Tallada, V. A.; Garzon, A.; Thode, G.; Daga, R. R.; Cruzado, L.; Jimenez, J.; Sánchez, M.; del Rey, F.; Benito, J.; Domínguez, A.; Revuelta, J. L.; Moreno, S.; Armstrong, J.; Forsburg, S. L.; Cerutti, L.; Lowe, T.; McCombie, W. R.; Paulsen, I.; Potashkin, J.; Shpakovski, G. V.; Ussery, D.; Barrell, B. G.; Nurse, P.; Cerruti, L. *Nature* **2002**, *415*, 871–880.