**Table S2. Human cell cycle kinetics**

|  |  |  |  |
| --- | --- | --- | --- |
| **Cell type** | **Td (h)** | **TG1 (h)** | **Reference** |
| acute myeloblastic leukemia cells | 49 | 24 | (Baserga 1985) |
| amnion cells | 18.2 | 7.3 | (Sisken and Kinosita 1961) |
| amnion cells | 19.5 | 9.5 | (Baserga 1985) |
| amnion cells | 21.4 | 10.3 | (Sisken and Kinosita 1961) |
| ascites carcinoma cells | 113 | 50 | (Baserga 1985) |
| basal cell carcinoma cells | 67 | 36 | (Baserga 1985) |
| bone marrow cells | 18 | 2 | (Baserga 1985) |
| BR:BT-549; NCI60 panel | 53.9 | 30.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| BR:HS 578T; NCI60 panel | 53.8 | 30.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| BR:MCF7; NCI60 panel | 25.4 | 14.7 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| BR:MDA-MB-231; NCI60 panel | 41.9 | 23.7 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| BR:T-47D; NCI60 panel | 45.5 | 30.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:SF-268; NCI60 panel | 33.1 | 17.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:SF-295; NCI60 panel | 29.5 | 17.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:SF-539; NCI60 panel | 35.4 | 23.59 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:SNB-19; NCI60 panel | 34.6 | 21.3 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:SNB-75; NCI60 panel | 62.8 | 40.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CNS:U251; NCI60 panel | 23.8 | 9.8 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:COLO 205; NCI60 panel | 23.8 | 14.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:HCC-2998; NCI60 panel | 31.5 | 19.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:HCT-116; NCI60 panel | 17.4 | 8.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:HCT-15; NCI60 panel | 20.6 | 10.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:HT29; NCI60 panel | 19.5 | 13 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:KM12; NCI60 panel | 23.7 | 11.4 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| CO:SW-620; NCI60 panel | 20.4 | 13.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| colon epithelial cells | 25 | 9 | (Baserga 1985) |
| epidermoid carcinoma cells | 24 | 9 | (Baserga 1985) |
| Fibroblasts | 18 | 5.5 | (Defendi and Manson 1963) |
| HeLa | 16.2 | 7.6 | (Kumei *et al.* 1989) |
| HeLa | 19 | 12.1 | (Luciani *et al.* 2001) |
| HeLa | 19.4 | 11 | (Hahn *et al.* 2009) |
| HeLa | 20.4 | 14.9 | (Luciani *et al.* 2001) |
| HeLa | 21 | 8 | (Baserga 1985) |
| HeLa | 25 | 13 | (Lennartz and Maurer 1964) |
| HeLa | 26.6 | 19.7 | (Luciani *et al.* 2001) |
| HeLa | 27.6 | 21.8 | (Luciani *et al.* 2001) |
| HeLa | 28 | 13.5 | (Defendi and Manson 1963) |
| HeLa | 28 | 14 | (Lennartz and Maurer 1964) |
| high grade non-Hodgkins lymphoma cells | 57 | 36 | (Brons *et al.* 1992) |
| Hodgkins lymphoma cells | 62 | 37 | (Brons *et al.* 1992) |
| intermediate grade non-Hodgkins lymphoma cells | 69 | 47 | (Brons *et al.* 1992) |
| KB | 31.5 | 6.5 | (Baserga 1985) |
| Ki-67 reactive hyperplasia lymphoma cells | 22 | 14 | (Brons *et al.* 1992) |
| LC:A549/ATCC; NCI60 panel | 22.9 | 13.8 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:EKVX; NCI60 panel | 43.6 | 29.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:HOP-92; NCI60 panel | 79.5 | 46. 2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:NCI-H226; NCI60 panel | 61 | 41.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:NCI-H23; NCI60 panel | 33.4 | 15.4 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:NCI-H322M; NCI60 panel | 35.3 | 22.8 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:NCI-H460; NCI60 panel | 17.8 | 12.6 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LC:NCI-H522; NCI60 panel | 38.2 | 25.3 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:CCRF-CEM; NCI60 panel | 26.7 | 12.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:HL-60(TB) ; NCI60 panel | 28.6 | 16.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:K-562; NCI60 panel | 19.6 | 10.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:MOLT-4; NCI60 panel | 27.9 | 15.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:RPMI-8226; NCI60 panel | 33.5 | 12.4 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| LE:SR; NCI60 panel | 28.7 | 14.0 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| low grade non-Hodgkins lymphoma cells | 107 | 80 | (Brons *et al.* 1992) |
| Lymphocytes | 30.4 | 14.2 | (Aoki and Moore 1970) |
| Lymphocytes | 33.1 | 15.1 | (Aoki and Moore 1970) |
| Lymphocytes | 38.4 | 21.2 | (Aoki and Moore 1970) |
| Lymphocytes | 43.5 | 25.9 | (Aoki and Moore 1970) |
| Lymphocytes | 72.5 | 49.4 | (Aoki and Moore 1970) |
| Lymphocytes | 76.5 | 55 | (Aoki and Moore 1970) |
| MCF-7 breast cancer cells | 24 | 14.4 | (Brunner *et al.* 1989) |
| ME:LOX IMVI; NCI60 panel | 20.5 | 11.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:M14; NCI60 panel | 26.3 | 15.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:MALME-3M; NCI60 panel | 46.2 | 30.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:MDA-MB-435; NCI60 panel | 25.8 | 10.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:SK-MEL-2; NCI60 panel | 45.5 | 25 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:SK-MEL-28; NCI60 panel | 35.1 | 24.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:SK-MEL-5; NCI60 panel | 25.2 | 17.7 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:UACC-257; NCI60 panel | 38.5 | 28.3 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| ME:UACC-62; NCI60 panel | 31.3 | 21.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| melanoma cells | 46 | 20 | (Baserga 1985) |
| NCI-H292 | 18.5 | 6.8 | (Hahn *et al.* 2009) |
| OV:IGROV1; NCI60 panel | 31 | 21.6 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:NCI/ADR-RES; NCI60 panel | 34 | 23.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:OVCAR-3; NCI60 panel | 34.7 | 19.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:OVCAR-4; NCI60 panel | 41.4 | 19.0 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:OVCAR-5; NCI60 panel | 48.8 | 28.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:OVCAR-8; NCI60 panel | 26.1 | 13.3 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| OV:SK-OV-3; NCI60 panel | 48.7 | 39.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| PR:DU-145; NCI60 panel | 32.3 | 18.2 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| PR:PC-3; NCI60 panel | 27.1 | 15.4 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:786-0; NCI60 panel | 22.4 | 13.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:A498; NCI60 panel | 66.8 | 41.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:ACHN; NCI60 panel | 27.5 | 14.9 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:CAKI-1; NCI60 panel | 39 | 25.0 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:RXF 393; NCI60 panel | 62.9 | 31.1 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:SN12C; NCI60 panel | 29.5 | 15.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:TK-10; NCI60 panel | 51.3 | 29.4 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| RE:UO-31; NCI60 panel | 41.7 | 26.5 | (Scherf *et al.* 2000; Garner and Eastman 2011), and this study |
| rectum epithelial cells | 48 | 33 | (Baserga 1985) |
| stomach epithelial cells | 24 | 9 | (Baserga 1985) |
| *H. sapiens* diploid fibroblasts | 18 | 6.6 | (Baserga 1985) |

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