**Table S1.** Assay setup and reproducibility for testing chain-terminating thymidine, adenosine, and guanosine analogs against telomerase.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **ddNTP**  | **dTTP (μM)** | **dATP (μM)** | **dGTP (μM)** | **Labeled dNTP\*** | **IC50 ± SD (μM)** | **Coefficient of Variation (%)** |
| **ddTTP** | 10 | 1000 | 10 | [α-32P]dGTP | 30.5 ± 0.4 | 1.5 |
| **ddATP** | 1000 | 20 | 10 | [α-32P]dGTP | 12.5 ± 2.9 | 23.2 |
| **ddGTP** | 10 | - | 20 | [α-32P]dTTP | 29.1 ± 7.8 | 27.0 |

\*labeled dNTPs used in 200 nM final concentration.