

Table 1 Comparison of Pol II elongation rate estimates derived from different studies

Gene (length)	Organism or cell line	Elongation rate	Method	Ref(s).
Galactose-inducible hybrid gene (8 kb)	Yeast	2 kb/min	Pol II ChIP	9
<i>E74</i> (60 kb)	<i>Drosophila</i>	1.1 kb/min	Northern blotting	6
<i>Ubx</i> (78 kb)	<i>Drosophila</i>	1.4 kb/min	<i>In situ</i> hybridization	8
<i>Hsp70</i> (2.4 kb)	<i>Drosophila</i>	1.2-1.5 kb/min	Nuclear run-on, live cell imaging	7,19
Murine mammary tumor virus (7.8 kb)	Rat HTC cells	1.5 kb/min	Nuclease protection assay	10
<i>Actb</i> (β -actin) (3 kb)	Normal rat kidney cells	1.3 kb/min	FISH	14
Engineered HIV reporter (3.8 kb)	Human U2OS cells	1.9 kb/min	Live cell imaging	13
<i>DMD</i> (dystrophin) (2,300 kb)	Human myogenic cells	2.4 kb/min	RT-PCR	12
Engineered gene cassette (3.3 kb)	Human U2OS cells	4.3 kb/min	Live cell imaging	11
Heterogeneous nuclear RNA	Human HeLa cells	3–6 kb/min	Radioisotope pulse labeling	15
10 native genes (~100–580 kb)	Human Tet-21 cells	3.8 kb/min	RT-PCR	1

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