Constants:

parameter	value	units	Source
kI	.024	s^{-1}	McClure WR. Rate-limiting steps in RNA chain initiation. *Proc Natl Acad Sci U S A*. 1980;77(10):5634-8.
e_x	42	nt/s	Proshkin S, Rahmouni AR, Mironov A, Nudler E. Cooperation between translating ribosomes and RNA polymerase in transcription elongation. *Science*. 2010;328(5977):504-8.
RNAP Conc.	30	nM	Arkin, A., Ross, J., & McAdams, H. H. (1998). Stochastic kinetic analysis of developmental pathway bifurcation in phage lambda-infected Escherichia coli cells. *Genetics*, *149*(4), 1633-48.
Vol. per cell	6.7E-10	uL/cell	Wang, Lei, Zhou, Yongjin J., Ji, Debin, Zhao, Zongbao K., An accurate method for estimation of the intracellular aqueous volume of Escherichia coli cells, Journal of Microbiological Methods (2013), doi: 10.1016/j.mimet.2013.02.006 p.8 top
Slope of McClure	1.04	uM/s	McClure WR. Rate-limiting steps in RNA chain initiation. *Proc Natl Acad Sci U S A*. 1980;77(10):5634-8.

Solved for Constants (in Julia):

parameter	value	units
$k_{E,j}$	.01365	s^{-1}
$R_{X,T}$	30E-6	mM
$K_{X,j}$	2.496E-5	mM
G_j	3093	mM
$\tau_{X,j}$	.569	--
$r_{x,j}$	2.611E-7	mM