Environment features	Surroundings nutrient concentration (M)	Nutrient diffusivity (dm^{2}s^{-1})	Volume of environment		
	10^{-2}	10^{-7}	1mm^3		
Gene network features	Transcription speed (s^{-1})	Translation speed (s^{-1})	Basal polymerase binding probability	Polymerase binding probability with activator	Ploymerase binding probability with repressor
	10^{-1}	10^{-1}	10^{-2}	0.5	0
	Timestep for TF dynamics (s.)	k_{on} BSTF (M^{-1}s^{-1})	k_{off} BSTF (s^{-1})	mRNA degradation rate (s^{-1})	Protein degradation rate (s^{-1})	Sizer degradation rate (s^{-1})
	30	10^2	10^5	10^{-3}	10^{-3}	0.2
Energy processing features	Nutrient to energy rate	ATP basal cost per V=1m3 (ATP units/μm^3)	Basal metabolism allometry coefficient	Growth cost of one cascade	Nutrient cost of one cascade
	30	10^6	5:6	10^3	10^2
Cell features	Mutation rate per base (per gen.)	Daughter cells ratio	Lethal cell volume	Basal death rate	
	10^{-4}	1:1	1	0.25	
Initial conditions	Initial sizer threshold	Initial cell volume (μm^3)	Initial number of transcripts	Initial number of cells	Theoretical simulation duration (s.)
	100	30	5	500	10^7