

Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR292	lexA3	0	0	0	0	0	0	0
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR206	wt	0	0,07	0,037	0,006	0,01	0,005	0,002
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR301	r-pal	0	0,26	0,222	0,014	0,05	0,009	0,008
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR214	l-pal	0	2,4	2,29	0,3	0,2	0,08	0,06
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR302	2-pal	0	3,1	2,7	0,5	0,3	0,3	0,1
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR206	wt	1	0,49	0,39	0,039	0,06	0,05	0,006
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR206	wt	2	1,5	1,1	0,07	0,2	0,3	0,02
Pop fraction PsfIA-GFP >= 15 [a.u.]	eSJR206	wt	3	3	1,6	0,4	0,3	0,2	0,2

Constitutive expression [A.U.]

Mean PtetO-mKate [a.u.]	eSJR203	wt-auto	0	1,89	1,56	0,96	0,1	0,05	0,02
Mean PtetO-mKate [a.u.]	eSJR292	lexA3	0	1,89	1,47	1,01	0,05	0,04	0,02
Mean PtetO-mKate [a.u.]	eSJR206	wt	0	1,8	1,47	1	0,04	0,03	0,06
Mean PtetO-mKate [a.u.]	eSJR301	r-pal	0	2,11	1,62	1,18	0,04	0,02	0,05
Mean PtetO-mKate [a.u.]	eSJR214	l-pal	0	1,94	1,58	1,05	0,07	0,03	0,04
Mean PtetO-mKate [a.u.]	eSJR302	2-pal	0	2,6	1,83	1,32	0,1	0,01	0,05
Mean PtetO-mKate [a.u.]	eSJR206	wt	1	1,9	1,54	1,01	0,2	0,03	0,06
Mean PtetO-mKate [a.u.]	eSJR206	wt	2	1,9	1,54	0,96	0,1	0,06	0,07
Mean PtetO-mKate [a.u.]	eSJR206	wt	3	2,1	1,58	1,06	0,3	0,02	0,05

Cell size

Mean cell size [um^2]	eSJR203	wt-auto	0	1,56	1,71	2,67	0,03	0,02	0,07
Mean cell size [um^2]	eSJR292	lexA3	0	1,46	1,69	2,5	0,02	0,05	0,2
Mean cell size [um^2]	eSJR206	wt	0	1,49	1,68	2,47	0,04	0,02	0,1
Mean cell size [um^2]	eSJR301	r-pal	0	1,62	1,73	2,61	0,04	0,01	0,07
Mean cell size [um^2]	eSJR214	l-pal	0	1,79	1,98	3,2	0,09	0,01	0,07
Mean cell size [um^2]	eSJR302	2-pal	0	1,68	1,99	3,78	0,08	0,05	0,08
Mean cell size [um^2]	eSJR206	wt	1	1,66	2,03	3,2	0,02	0,06	0,1
Mean cell size [um^2]	eSJR206	wt	2	1,94	2,83	4,3	0,04	0,09	0,1
Mean cell size [um^2]	eSJR206	wt	3	2,3	4,67	6,4	0,1	0,07	0,4

Estimation of alpha for different SOS thresholds

strainID	Strain	Cipro	alpha [1/h]	err	
Model PsfIA-GFP threshold 4	eSJR206	wt	0	0,0015	0,0002
Model PsfIA-GFP threshold 4	eSJR301	r-pal	0	0,021	0,003
Model PsfIA-GFP threshold 4	eSJR214	l-pal	0	0,052	0,008
Model PsfIA-GFP threshold 4	eSJR302	2-pal	0	0,08	0,01
Model PsfIA-GFP threshold 4	eSJR206	wt	1	0,011	0,003
Model PsfIA-GFP threshold 4	eSJR206	wt	2	0,04	0,01
Model PsfIA-GFP threshold 4	eSJR206	wt	3	0,09	0,03

Relative distance to model [%]

strainID	Strain	Cipro	Relative distance to model [%]			error			
			gly	glu	glu+aa	gly	glu	glu+aa	
Model PsfIA-GFP threshold 4	eSJR206	wt	0	10	-14	-40	10	7	10
Model PsfIA-GFP threshold 4	eSJR301	r-pal	0	-2	9	-10	7	8	30
Model PsfIA-GFP threshold 4	eSJR214	l-pal	0	-6	27	-20	3	6	20
Model PsfIA-GFP threshold 4	eSJR302	2-pal	0	-10	10	10	10	20	20
Model PsfIA-GFP threshold 4	eSJR206	wt	1	-10	10	10	10	20	20
Model PsfIA-GFP threshold 4	eSJR206	wt	2	-12	60	-37	8	20	5
Model PsfIA-GFP threshold 4	eSJR206	wt	3	-14	70	-44	6	20	7
Model PsfIA-GFP threshold 4	eSJR206	wt	3	-10	50	-47	20	20	5

alpha err

Model PsfIA-GFP threshold 6	eSJR206	wt	0	0,0009	0,0001
Model PsfIA-GFP threshold 6	eSJR301	r-pal	0	0,014	0,002
Model PsfIA-GFP threshold 6	eSJR214	l-pal	0	0,035	0,006
Model PsfIA-GFP threshold 6	eSJR302	2-pal	0	0,048	0,007
Model PsfIA-GFP threshold 6	eSJR206	wt	1	0,007	0,002
Model PsfIA-GFP threshold 6	eSJR206	wt	2	0,021	0,005
Model PsfIA-GFP threshold 6	eSJR206	wt	3	0,039	0,008

Relative distance to model [%]

strainID	Strain	Cipro	Relative distance to model [%]			error			
			gly	glu	glu+aa	gly	glu	glu+aa	
Model PsfIA-GFP threshold 6	eSJR206	wt	0	10	-7	-60	8	9	10
Model PsfIA-GFP threshold 6	eSJR301	r-pal	0	2	13	-40	9	6	10
Model PsfIA-GFP threshold 6	eSJR214	l-pal	0	-1	25	-53	5	2	8
Model PsfIA-GFP threshold 6	eSJR302	2-pal	0	1	10	-34	7	10	9
Model PsfIA-GFP threshold 6	eSJR206	wt	1	-5	40	-52	5	20	4
Model PsfIA-GFP threshold 6	eSJR206	wt	2	-1	40	-61	7	20	7
Model PsfIA-GFP threshold 6	eSJR206	wt	3	10	10	-51	10	10	8

alpha err

Model PsfIA-GFP threshold 10	eSJR206	wt	0	0,00053	0,00009
Model PsfIA-GFP threshold 10	eSJR301	r-pal	0	0,005	0,001
Model PsfIA-GFP threshold 10	eSJR214	l-pal	0	0,02	0,005
Model PsfIA-GFP threshold 10	eSJR302	2-pal	0	0,026	0,005
Model PsfIA-GFP threshold 10	eSJR206	wt	1	0,0038	0,0009
Model PsfIA-GFP threshold 10	eSJR206	wt	2	0,012	0,003
Model PsfIA-GFP threshold 10	eSJR206	wt	3	0,021	0,004

Relative distance to model [%]

strainID	Strain	Cipro	Relative distance to model [%]			error			
			gly	glu	glu+aa	gly	glu	glu+aa	
Model PsfIA-GFP threshold 10	eSJR206	wt	0	10	10	-71	10	10	10
Model PsfIA-GFP threshold 10	eSJR301	r-pal	0	0	32	-74	20	4	10
Model PsfIA-GFP threshold 10	eSJR214	l-pal	0	-3	35	-64	8	4	3
Model PsfIA-GFP threshold 10	eSJR302	2-pal	0	2	30	-55	7	10	9
Model PsfIA-GFP threshold 10	eSJR206	wt	1	0	40	-65	5	10	7
Model PsfIA-GFP threshold 10	eSJR206	wt	2	5	30	-77	10	20	5
Model PsfIA-GFP threshold 10	eSJR206	wt	3	10	0	-60	10	10	10

alpha err

Model PsfIA-GFP threshold 12	eSJR206	wt	0	0,0004	0,00007
Model PsfIA-GFP threshold 12	eSJR301	r-pal	0	0,0026	0,0009
Model PsfIA-GFP threshold 12	eSJR214	l-pal	0	0,016	0,004
Model PsfIA-GFP threshold 12	eSJR302	2-pal	0	0,02	0,004
Model PsfIA-GFP threshold 12	eSJR206	wt	1	0,003	0,0007
Model PsfIA-GFP threshold 12	eSJR206	wt	2	0,009	0,002
Model PsfIA-GFP threshold 12	eSJR206	wt	3	0,016	0,003

Relative distance to model [%]

strainID	Strain	Cipro	Relative distance to model [%]			error			
			gly	glu	glu+aa	gly	glu	glu+aa	
Model PsfIA-GFP threshold 12	eSJR206	wt	0	10	0	-70	10	10	10
Model PsfIA-GFP threshold 12	eSJR301	r-pal	0	0	42	-80	20	5	10
Model PsfIA-GFP threshold 12	eSJR214	l-pal	0	-5	42	-66	7	5	5
Model PsfIA-GFP threshold 12	eSJR302	2-pal	0	-1	30	-57	9	10	9
Model PsfIA-GFP threshold 12	eSJR206	wt	1	2	40	-73	6	10	5
Model PsfIA-GFP threshold 12	eSJR206	wt	2	10	30	-81	10	20	3
Model PsfIA-GFP threshold 12	eSJR206	wt	3	10	0	-60	10	10	20

alpha err

Model PsfIA-GFP threshold 14	eSJR206	wt	0	0,0003	0,00006
Model PsfIA-GFP threshold 14	eSJR301	r-pal	0	0,0014	0,0005
Model PsfIA-GFP threshold 14	eSJR214	l-pal	0	0,012	0,003
Model PsfIA-GFP threshold 14	eSJR302	2-pal	0	0,015	0,004
Model PsfIA-GFP threshold 14	eSJR206	wt	1	0,0023	0,0006
Model PsfIA-GFP threshold 14	eSJR206	wt	2	0,007	0,002
Model PsfIA-GFP threshold 14	eSJR206	wt	3	0,013	0,003

Relative distance to model [%]

strainID	Strain	Cipro	Relative distance to model [%]			error			
			gly	glu	glu+aa	gly	glu	glu+aa	
Model PsfIA-GFP threshold 14	eSJR206	wt	0	10	0	-74	10	10	8
Model PsfIA-GFP threshold 14	eSJR301	r-pal	0	0	44,2	-84	20	0,7	8
Model PsfIA-GFP threshold 14	eSJR214	l-pal	0	-8	53	-67	8	6	5
Model PsfIA-GFP threshold 14	eSJR302	2-pal	0	-3	40	-58	9	10	8
Model PsfIA-GFP threshold 14	eSJR206	wt	1	-1	40	-72	9	20	5
Model PsfIA-GFP threshold 14	eSJR206	wt	2	10	30	-86	10	30	4
Model PsfIA-GFP threshold 14	eSJR206	wt	3	11	0	-70	10	10	20