mutual info [bits] - 0.00000 - 0.00000 -	Glucose -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS	0.0003 - 0.0002 - 0.0001 - 0.0000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
mutnal info [pits] - 0.0003 - 0.0001 - 0.0000 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS	0.0008 - 0.0006 - 0.0004 - 0.0002 - 0.0000 - 0.0
0.0003 - 0.0002 - 0.0001 - 0.0000 -	Arabinose -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS	0.0004 - 0.0003 - 0.0002 - 0.0001 - 0.0000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
matrael info [bits] 0.0004 - 0.0003 - 0.0001 - 0.0000 -	Galactose -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS	0.00020 - 0.00015 - 0.00005 - 0.00005 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
0.00050 - 0.00050 - 0.00000 -	Sodium Salicytate -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	St 0.00020 - 0.00015 - 0.00010 - 0.00005 - 0.00005 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
[st] 0.00020 - 0.00015 - 0.00005 - 0.00000 -	Ethanol (2.5 %) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 10
mutral jubo 0.0020 - 0.0015 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.00000000	Stationary Phase (1d) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 30,0004 - 0.0003 - 0.0002 - 0.0001 - 0.0000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
mutual info [bits] - 500000 -	Stationary Phase (3d) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.0004 - 0.0002 - 0.0000 - 0.00
0.0004 - 0.0003 - 0.0002 - 0.0001 - 0.0000 -	Cold Shock (1h at 10C) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 4.0×10 ⁻⁵ - 3.0×10 ⁻⁵ - 2.0×10 ⁻⁵ - 1.0×10 ⁻⁵ - 0110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
0.00015 - 0.00010 - 0.00005 - 0.00000 -	Ampicillin -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 50
0.00020 - 0.00015 - 0.00010 - 0.00005 - 0.00000 -	Heatshock -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS \$\frac{50 \times 10^{-5} - 5.0 \times 10^{-5} - 2.0 \times 10^{-5} - 2.0 \times 10^{-5} - 2.0 \times 1.0 \times 10^{-5} - 2.0 \tim
mntral info [bits] - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.00000000	position relative to TSS H2O2 (0.1mM 30min) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 30,0004 - 0,0003 - 0,0002 - 0,0001 - 0,0000 - -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
0.0003 - 0.0002 - 0.0001 - 0.0000 -	LB LB -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS [5] 0.00010 - 0.00005 - 0.00005 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000
0.0020 - 0.0015 - 0.0010 - 0.0005 - 0.0000 -	Nirtogen starvation -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.0002 - 0.0001 - 0.0000 - 0.00
mntnal info [bits] - 200000 - 0.00000 - 0.00000 -	position relative to TSS Magnesium starvation -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.0003 - 0.0002 - 0.0001 - 0.0000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
0.0015 - 0.0010 - 0.0005 - 0.0000 -	position relative to TSS Sulphur starvation -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS State 0.00020 - 0.00015 - 0.00005 - 0.00005 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
mntral iulo [pits] 0.0020 - 0.0015 - 0.0005 - 0.0000 -	Sodium Salicytate (induction) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.0004 - 0.0003 - 0.0002 - 0.0001 - 0.0000 - 0.00
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mntral info [bits]	Ethanol (induction) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 3 0.00015 - 0.000010 - 0.00005 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
mntral ive [pits] 0.0008 - 0.0006 - 0.0002 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.00000000	Glutamic acid (pH 2.5) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 10
0.00020 - 0.00015 - 0.00010 - 0.00005 - 0.00000 -	Leucine (10mM) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 30
mutnal info [bits] - 10000 -	position relative to TSS 2pH (HCl) -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.00050 - 0.00025 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
- 0.00000 - 0.00000 - 0.00000 -	position relative to TSS Medium Cold shock 19C -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 0.0002 - 0.0001 - 0.0000 - 0.00
mutual info [bits] - 0.000 -	2,2-Dipyridyl -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 10.00015 - 0.00010 - 0.00005 - 0.00000 - -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
0.00050 - 0.00050 - 0.00000 -	Phenazine Methosulfate -110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40	position relative to TSS 50,00020 - 0.00015 - 0.00005 - 0.00005 - 0.00005 - 0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40
	position relative to TSS	position relative to TSS
mutual info [bits] 0.00000 -	H2O2 (2.5mM, 10min)	0.0006 - 0.0005 - 0.0004 - 0.0003 - 0.0002 - 0.0001 - 0.0001 - 0.0
0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Gentamicin	5 0.0000
untral info [bits] - 0.0000 - 0.000 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Copper Sulfate (500μM)	0110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS 30
mutaal info [bits] 0.00015 - 0.000010 - 0.000005 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS HOCI (4mM)	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
0.00000 - 0.0003 - 0.0002 - 0.0001 - 0.0000 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Spermidine	0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS 0.00015 - 0.00010 - 0.00005 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.000000 - 0.0000000 - 0.
mutual info [bits] - 0.00000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Serine Hydroxamate	0.00000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Sign 0.00015 - 0.00005 - 0.00005 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.000000 - 0.000000 -
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0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Low Osmolarity	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
0.0000 - 0.0003 - 0.0002 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.0000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS LB + 0.75M NaCl	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Side
mutnal info [bits] - 0.0000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.00000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Low Phosphate	$-110 - 100 - 90 - 80 - 70 - 60 - 50 - 40 - 30 - 20 - 10 0 10 20 30 40$ $position relative to TSS$ $[S] 8.0 \times 10^{-5} - 6.0 \times 10^{-5} - 4.0 \times 10^{-5} - 2.0 \times 10^{-5} - 2.0 \times 10^{-5} - 10.0 \times 10^{-5} $
mutnal info [bits] - 0.000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Copper Sulfate (2mM)	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS 30
mutnal info [bits] - 0.0000 - 0.0000 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Acetate	0.00000
mutual info [bits] - 0.00000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.0000000 - 0.00000000	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Nitrate	0.0000110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS
0.00000 - 0.00015 - 0.000010 - 0.00005 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS Anaerobic + Nitrate	$\frac{3000005}{0.000000} - \frac{1000000}{-110 - 100 - 90 - 80 - 70 - 60 - 50 - 40 - 30 - 20 - 10} = \frac{3000000}{0.000000} = \frac{30000000}{0.000000} = \frac{30000000}{0.000000} = \frac{30000000}{0.000000} = \frac{300000000}{0.000000} = \frac{300000000}{0.000000} = \frac{3000000000}{0.0000000} = 3000000000000000000000000000000000000$
mrtra 0.00005 -	-110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS	2.0×10 ⁻⁵ - 0110-100-90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 position relative to TSS