Data Table			
Paramters	**Values**	**Units**	**Source**
Specific Volume Basis (B)	1.29E-13	gDW/cell	Calculated
Avogadro's constant	6.02E+23	molecules/mol	Bionumbers (BID: 101907)
Ribosome elongation rate	18	aa/s	BID: 100059 (derived from table listed for doubling time = 40 min)
Ribosome elongation rate	64800	aa/hr	Calculated
Characteristic Protein Length (L)	333	aa	Given
Characteristic Elongation Rate Constant <keL>	194.5946	hr^-1	Calculated
Protein Length considered	300	aa	Given
Corrected Elongation Rate Constant keL	216	hr^-1	Calculated
Ribosome concentration	26000	molecules/cell	Bionumbers from Table 1. in article titled "How many ribosomes are in a cell"
Total Ribosome concentration	0.000335	mmol/gDW	Calculated
kI value	0.666667	s^-1	Given
kI value	2400	hr^-1	Calculated
Time constant (tauL)	0.09	dimensionless	Calculated
Saturation constant (KL)	0.00155	mmol/gDW	Calculated
Protein half-life	24	hr	Given
Degradation Rate Constant (thethap)	0.028881	hr^-1	Calculated
E.Coli Doubling Time	0.666667	hr	Given
Specific Growth Rate	1.039721	hr^-1	Calculated
Transcription Gain Function (KappaX)	5.75E-07	mmol/gDW	From Prelim-1
Translational Control Function	1	dimensionless	Given
W1	0.25	dimensionless	From Prelim-1
W2	98.75	dimensionless	From Prelim-1
Kd	0.09	mM	From Prelim-1
n	1.85	dimensionless	From Prelim-1
Translation Gain Function (KappaL)	484.8394	dimensionless	Calculated
KappaL*KappaX	0.000279	mmol/gDW	Calculated
Translation Gain Function (KappaL) for Kp = 2	969.6788	dimensionless	Calculated
KappaL (Kp = 2) *KappaX	0.000558	mmol/gDW	Calculated
KappaL (Kp = 5) *KappaX	0.001394	mmol/gDW	Calculated