

Amino acids, cofactors and others									
reagent	molar mass	final concentration in the reaction in mM	mass in g for 1500 reactions à 50 µL	dose size in g	cost in \$ for dose size (September 2015)	amount for 1500 reactions per dose	cost for 1500 reactions	cost for one reaction	
L-Aspartic acid	133.10	2.00	0.020	100	18.51	0.0002	0.004	2.46E-06	
CoA Na-Salz	767.54	0.27	0.016	0.01	57.58	1.5543	89.499	5.97E-02	
E. coli tRNA	-	-	0.013	0.1	178.45	0.1275	22.752	1.52E-02	
Folinic acid (Ca-salt hydrate)	473.44	0.07	0.003	0.25	70.58	0.0102	0.722	4.81E-04	
Glycine	75.07	2.00	0.011	500	44.50	0.0000	0.001	6.68E-07	
L-Alanine	89.09	2.00	0.013	1	10.86	0.0134	0.145	9.67E-05	
L-Arginine	174.20	2.00	0.026	100	46.81	0.0003	0.012	8.15E-06	
L-Asparagin monohydrat	150.14	2.00	0.023	25	21.00	0.0009	0.019	1.26E-05	
L-Cysteine	121.16	2.00	0.018	2.5	12.28	0.0073	0.089	5.95E-05	
L-Glutamine	146.14	2.00	0.022	100	56.60	0.0002	0.012	8.27E-06	
L-Glutamic acid	147.13	2.00	0.022	100	21.27	0.0002	0.005	3.13E-06	
L-Histidine	155.15	2.00	0.023	5	11.66	0.0047	0.054	3.62E-05	
L-Isoleucine	131.18	2.00	0.020	1	12.73	0.0197	0.250	1.67E-04	
L-Leucine	131.18	2.00	0.020	25	17.71	0.0008	0.014	9.29E-06	
L-Methionine	149.21	2.00	0.022	5	11.66	0.0045	0.052	3.48E-05	
L-Threonine	119.12	2.00	0.018	1	10.86	0.0179	0.194	1.29E-04	
L-Tryptophan	204.23	2.00	0.031	1	12.10	0.0306	0.371	2.47E-04	
NAD	663.43	0.33	0.016	0.25	52.24	0.0657	3.431	2.29E-03	
Na-Oxalat	134.00	4.00	0.040	100	24.30	0.0004	0.010	6.51E-06	
L-Phenylalanine	165.19	2.00	0.025	100	75.21	0.0002	0.019	1.24E-05	
Phosphoenolpyruvate (PEP)	168.04	33.00	0.416	0.25	92.12	1.6636	153.242	1.02E-01	
L-Proline	115.13	2.00	0.017	0.01	18.60	1.7270	32.123	2.14E-02	
Putrescine	88.15	1.00	0.007	0.1	28.57	0.0661	1.889	1.26E-03	
Spermidine	145.25	1.50	0.016	1	27.59	0.0163	0.451	3.01E-04	
L-Valine	117.15	2.00	0.018	1	14.06	0.0176	0.247	1.65E-04	
K-Glutamate	203.23	80.00	1.219	100	50.91	0.0122	0.621	4.14E-04	
Mg-Glutamate	388.61	4.00	0.117	250	43.70	0.0005	0.020	1.36E-05	
							306.249	0.204	

NTPs									
reagent	molar mass	final concentration in the reaction in mM	Volume in mL for 1500 reactions à 50 µL	dose size in mL	cost in \$ for dose size (September 2015)	amount for 1500 reactions per dose	cost for 1500 reactions	cost for one reaction	
ATP 100 mM	573.10	1.5	1.125	0.25	27.50	4.5	123.75	0.083	
GTP 100 mM	523.18	1.5	1.125	0.25	27.50	4.5	123.75	0.083	
UTP 100 mM	550.10	0.9	0.675	0.25	27.50	2.7	74.25	0.050	
CTP 100 mM	549.10	0.9	0.675	0.25	27.50	2.7	74.25	0.050	
							396.01	0.264	

Extract for 1500 reactions à 50 µL			
medium		S30A washing buffer	
reagent	cost in \$ for 15 L of 2xYT+P medium	reagent	cost for 3 L of S30A washing buffer
K ₂ HPO ₄	11.81	DTT	0.31
KH ₂ PO ₄	3.00	K-Glutamate	18.62
NaCl	2.28	Mg-Glutamate	2.85
Tryptone	30.25		21.78
Yeast extract	23.83		92.95
			71.16

All together	Costs for 1500 reactions	cost in \$ for a single 50 µL CFPS reaction
Amino acids, cofactors and others	306.25	0.204
NTPs	396.01	0.264
Extract	92.95	0.062
TOTAL	795.21	0.530

subtotals with green background