

Supporting Information

Antifolate-induced depletion of intracellular glycine and purines inhibits thymineless death in *E. coli*

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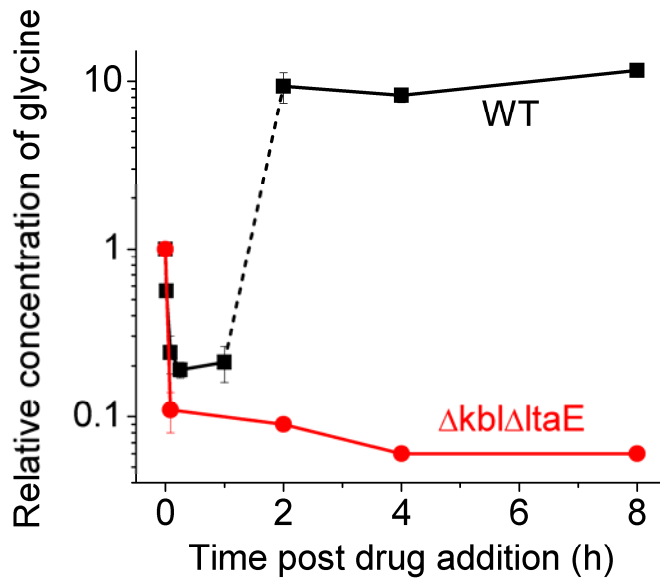
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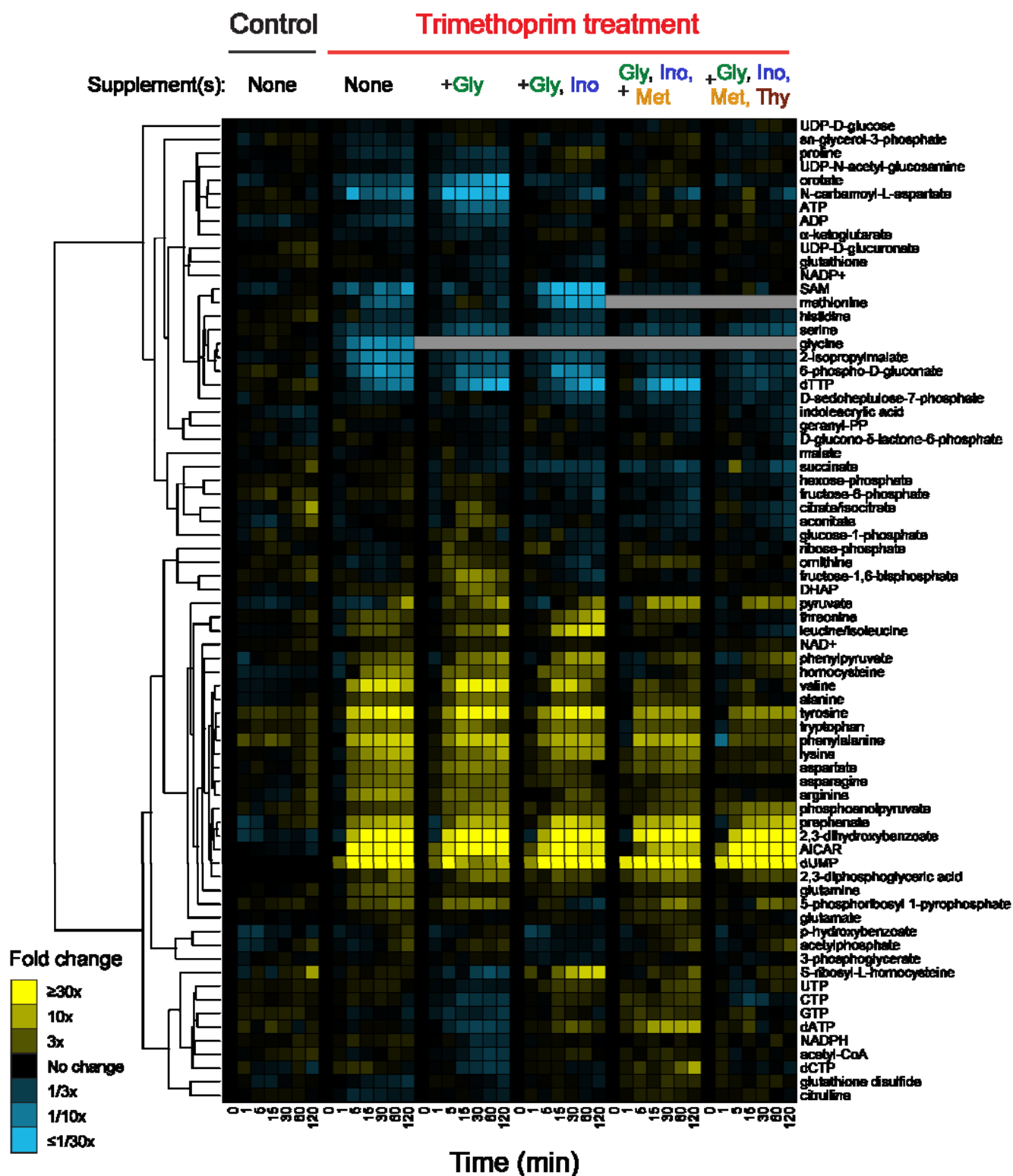
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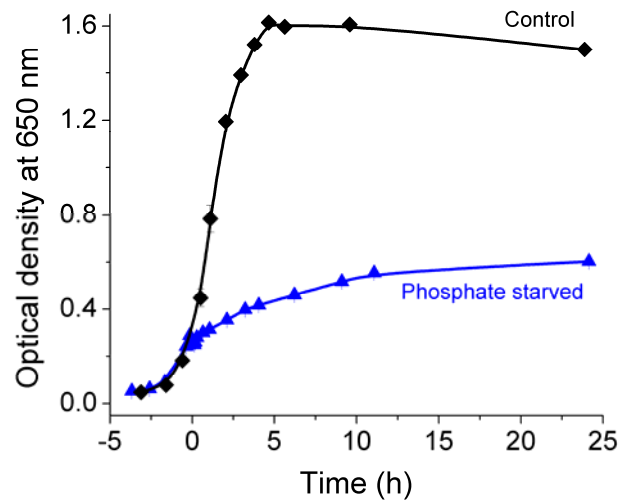
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Supplementary Figure 1. Cells are able to convert threonine to generate glycine in the presence of a purine source. Unlike wildtype *E. coli*, intracellular glycine levels do not accumulate in $\Delta kbl\Delta taE$ mutant *E. coli* treated with trimethoprim while growing in inosine-supplemented minimal media. Error bars show ± 1 SE of the mean ($n \geq 2$ independent experiments). WT, wildtype.



Supplementary Figure 2. Profiles of 72 intracellular metabolites in wildtype *E. coli* treated with trimethoprim while growing in minimal media containing indicated supplements. Relative levels are expressed as the log ratio of the normalized signal intensity in drug treated cells at each time point to the normalized signal intensity in the drug-free time 0 sample ($n \geq 2$ independent experiments). In cases of exogenous glycine and/ or methionine addition, glycine and methionine levels are not reported because intracellular pools could not be differentiated from extracellular pools.



Supplementary Figure 3. Phosphate starvation halts *E. coli* growth. Growth curves of control cells were done in MOPS minimal media with 0.5 mM K₂HPO₄. For phosphate starvation, cells were grown in MOPS minimal media with 0.5 mM K₂HPO₄ to A₆₅₀ ~ 0.3 at 37°C and centrifuged for 4 min at 5000 g at room temperature. Media was then aspirated, and then cells were resuspended in MOPS minimal media with 0 mM K₂HPO₄. Time 0 is when phosphate starved cells were switched to MOPS minimal media without K₂HPO₄ ($n = 3$).

Supplementary Table 1. Data used to generate heat maps in this manuscript. Raw ion counts are shown for every measured metabolite. Relative concentrations were determined by normalizing raw ion counts to those at time 0 and normalizing by optical density of cells. For raw ion counts, values less than 100 were set to a floor of 100.

Control (no trimethoprim) replicate 1 raw data							
Time (min)	0	1	5	15	30	60	120
Optical density	0.470	0.470	0.499	0.528	0.586	0.703	0.936
2,3-dihydroxybenzoate	1151	420	242	610	1037	1500	885
2-Isopropylmalic acid	65822	47634	46735	62339	64983	102819	185334
3-phosphoglycerate	3500	3202	4771	5119	5906	4668	7389
5-phosphoribosyl 1-pyrophosphate	1694	2574	2125	3298	3805	5532	4310
6-phospho-D-gluconate	2783	4846	7029	5944	4286	5107	2868
acetyl-CoA-nega	8674	6514	9013	9140	11028	16454	28229
acetylphosphate	5293	2714	2603	4672	7199	10735	22670
aconitate	1415	820	414	506	1255	3815	8809
ADP-D-glucose	321	380	100	100	126	713	1897
ADP-nega	1828	852	1157	1372	982	2226	2829
a-ketoglutarate	4652	5506	4800	6323	7063	7469	12218
alanine-CBZ	170270	137711	142030	173951	198793	279994	498760
alanine-CBZ-C13N15-IS	304369	352217	334544	377739	394387	330117	369047
AICAR	100	100	100	100	100	100	100
arginine-CBZ	3563	3889	3236	2526	2919	6226	14406
asparagine-CBZ	19154	22984	23344	18915	19065	31583	77487
aspartate-CBZ	86721	77158	121558	105779	104469	188964	341140
ATP-nega	9779	12800	12236	15378	14818	20088	25931
citrate	2758	2447	2744	2691	2335	7863	45709
citrate/isocitrate	25134	16450	20052	26693	37146	100158	422864
citrulline-CBZ	10028	11299	14237	16847	17589	19921	20584
coenzyme A-nega	100	204	587	830	868	1243	2714
CTP/UTP-nega-IS	7007	7776	9884	9055	10399	11114	11894
CTP-nega	2847	3997	4065	3316	4237	5669	7507
dATP-nega	132	100	125	133	100	101	282
dCTP-nega	100	100	100	100	100	341	101
D-glucono- δ -lactone-6-phosphate	966	1095	1001	514	1437	1149	784
dihydroxy-acetone phosphate	3393	3183	3409	2707	3994	5409	5317
D-sedoheptulose-7-phosphate	1704	902	2135	1971	2093	3188	4191
dTTP-nega	1923	2611	2625	2385	3318	6262	8842
fructose-1,6-bisphosphate	19279	26752	24076	25387	30796	52379	100971
fructose-6-phosphate	507	954	1150	1568	665	2069	2542
geranyl-PP	703	511	848	962	943	797	1182
glucose-1-phosphate	677	389	589	1299	852	794	881
glutamate-CBZ	5652096	5834149	6677658	7040490	6799150	9519749	11634733
glutamate-CBZ-C13N15-IS	100561	100795	97570	103761	101655	76775	68463
glutamine-CBZ	220107	256322	297370	281060	294716	420108	789820
glutathione disulfide-nega	11721	15845	7885	7284	17013	24854	28146
glutathione-nega	58929	54157	71089	69856	76623	99745	190878
glycine-CBZ	21537	21116	26188	34641	28847	34289	36335
GTP-nega	1979	3559	3585	3901	4797	6405	5654
hexose-phosphate	7850	9903	9893	11525	12498	14744	16429
histidine-CBZ	4539	5391	4579	6575	6343	10205	17402
homocysteine-MMTS	11244	6836	8021	8222	9527	14023	17411
Indoleacrylic acid	1991	2505	1969	1483	1400	1229	2358
isocitrate	100	100	100	100	100	100	447

leucine/isoleucine-CBZ	32323	28569	30448	32891	36620	52256	84798
lysine-CBZ	105084	113280	118906	117772	127197	220666	429518
malate	24764	21126	26961	32545	41227	52555	78188
methionine-CBZ	16811	16773	18304	21057	25500	29739	45521
NAD+_nega	27662	25388	24139	25271	31878	50109	69828
NADP+_nega	6340	5542	5420	6081	5392	8106	13874
NADPH_nega	1997	2423	2284	2593	2388	3894	5316
N-Carbamoyl-L-aspartate	4043	4825	4923	7729	7125	6869	6135
ornithine-CBZ	7835	8100	12914	12789	11912	19348	30016
orotate	11430	5459	8063	13541	17904	21032	19133
p-aminobenzoate	212	100	100	100	100	100	100
pantothenate	100	100	151	100	100	188	1714
phenylalanine-CBZ	243	673	419	684	720	310	768
phenylpyruvate	277	161	418	528	772	504	810
phosphoenolpyruvate	216	474	164	417	580	527	1352
p-hydroxybenzoate	903	246	390	1014	923	1476	1347
prephenate	256	100	100	398	687	775	976
proline-CBZ	50519	40880	53094	58425	62121	89358	110731
pyruvate	329	221	141	182	182	272	853
ribose-phosphate	1459	1252	1461	1867	2158	2105	2297
S-adenosyl-L-methionine - POS	1189	750	842	1370	1391	2392	2355
serine-CBZ	13809	19917	17432	22641	22129	21980	28085
shikimate-3-phosphate	2738	1700	1371	1542	1517	1571	1849
sn-glycerol-3-phosphate	899	524	744	951	1423	1357	2587
S-ribosyl-L-homocysteine-nega	321	207	708	113	528	832	4919
succinate C12	1157	992	922	1025	1412	1724	7410
threonine-CBZ	25330	30433	31166	30907	31993	58977	103402
trptophan-CBZ	1921	1688	2609	2496	2994	3170	7229
tyrosine-CBZ	2318	4330	4571	5783	4804	5492	8755
UDP-D-glucose	109899	93098	116343	117598	146269	178159	203116
UDP-D-glucuronate	18142	13844	18151	18365	27399	43216	61966
UDP-N-acetyl-glucosamine	22882	25745	22411	24938	27287	45062	53028
UDP-nega	532	100	692	205	555	1090	1308
UTP-nega	7259	8756	8910	9197	10189	14855	18422
valine-CBZ	43268	37021	37127	44831	52698	69156	80718

Control (no trimethoprim) replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.470	0.470	0.499	0.528	0.586	0.703	0.936
2,3-dihydroxybenzoate	1120	464	886	1415	918	1207	1223
2-Isopropylmalic acid	64456	45781	48217	67940	82134	109098	171036
3-phosphoglycerate	4408	2141	3649	4294	6230	6154	6351
5-phosphoribosyl 1-pyrophosphate	3613	4549	3914	3686	5183	5683	6608
6-phospho-D-gluconate	5251	4224	5715	7296	5541	7229	4036
acetyl-CoA-nega	6564	7161	7875	12094	14665	19110	27067
acetylphosphate	5313	2199	3220	4078	5717	10099	18219
aconitate	1301	1341	1016	761	1563	2957	8418
ADP-D-glucose	161	100	100	122	139	766	2036
ADP-nega	1935	1221	938	1286	943	2048	3723
a-ketoglutarate	5756	3681	4849	6026	7133	9985	11821
alanine-CBZ	158100	110404	120830	142650	159472	248234	405920
alanine-CBZ-C13N15-IS	357841	283761	316674	310848	302391	311393	323050
AICAR	100	100	100	100	100	163	129
arginine-CBZ	2733		2561	2455	2148	6241	16290
asparagine-CBZ	19388	19111	21019	19043	18255	29557	69363
aspartate-CBZ	71595	64169	103864	79667	85477	146923	333182
ATP-nega	13483	14484	14178	15419	21886	23182	30841
citrate	3424	3218	3467	3450	5174	9647	42136
citrate/isocitrate	29373	27243	23414	27516	50137	78605	494951
citrulline-CBZ	12798	10687	12942	13323	15844	20951	21405
coenzyme A-nega	261	602	330	1139	1383	1949	2863
CTP/UTP-nega-IS	8867	10259	11307	9958	12555	11858	13067
CTP-nega	4337	5246	4785	5138	5920	8756	9096
dATP-nega	100	265	100	370	284	129	337
dCTP-nega	144	298	100	100	100	107	100
D-glucono- δ -lactone-6-phosphate	979	1125	862	981	1015	900	1290
dihydroxy-acetone phosphate	3401	4290	3044	3005	3856	5837	5500
D-sedoheptulose-7-phosphate	2028	1274	2506	2279	3094	3338	2978
dTTP-nega	2931	3212	3198	2851	4066	5800	9617
fructose-1,6-bisphosphate	23425	26921	29543	25966	35977	42884	112357
fructose-6-phosphate	873	603	968	1840	1002	1386	2436
geranyl-PP	764	851	986	982	628	888	678
glucose-1-phosphate	616	568	1280	1293	545	1545	1919
glutamate-CBZ	6126956	5364036	6437701	6034474	6364152	8341125	11104074
glutamate-CBZ-C13N15-IS	110336	86123	97043	94438	81546	73081	70670
glutamine-CBZ	274387	223235	259455	260537	275447	388325	725291
glutathione disulfide-nega	24002	19628	15374	16861	19354	32958	45094
glutathione-nega	46236	55671	53510	63057	73323	104046	172490
glycine-CBZ	20906	19242	21868	31604	28691	31761	35141
GTP-nega	4449	4288	5968	5729	6715	6920	7249
hexose-phosphate	7722	8016	9505	12299	12917	14896	17351
histidine-CBZ	3915		4654	4671	5994	9295	16780
homocysteine-MMTS	9473	5034	6294	6733	8055	10127	14316
Indoleacrylic acid	2067	1645	1630	1485	1667	1405	2214
isocitrate	100	100	100	100	100	100	1085
leucine/isoleucine-CBZ	27913		25118	29118	33312	51755	78193
lysine-CBZ	108228		116052	103436	108244	199306	476059
malate	27412	22731	27414	33455	41229	54335	74416
methionine-CBZ	17013	15111	16828	18849	21294	29607	46417
NAD+ _{-nega}	20685	25573	29339	30234	33889	48135	78187
NADP+ _{-nega}	7101	6657	8710	9271	7686	12749	15466

NADPH_nega	2333	2535	2637	2539	3299	6156	6628
N-Carbamoyl-L-aspartate	5475	5804	6461	7412	7139	7202	5537
ornithine-CBZ	8914		9706	9591	10342	17036	30681
orotate	15077	7033	7903	13762	17266	19231	25217
p-aminobenzoate	199	103	100	100	100	100	100
pantothenate	100	100	100	100	100	330	1736
phenylalanine-CBZ	182		394	817	600	497	990
phenylpyruvate	780	117	414	434	325	1155	1122
phosphoenolpyruvate	596	312	507	610	756	853	989
p-hydroxybenzoate	1163	606	361	615	772	1485	929
prephenate	349	100	215	168	256	565	1455
proline-CBZ	48191	43685	47407	52272	58264	93046	111531
pyruvate	335	224	269	145	321	545	656
ribose-phosphate	1113	1101	1458	2310	2264	1228	2328
S-adenosyl-L-methionine - POS	1200	999	706	404	2228	2988	4493
serine-CBZ	16237	15441	18935	21097	21563	22472	27430
shikimate-3-phosphate	2073	1849	1244	1536	1951	1541	1504
sn-glycerol-3-phosphate	762	385	743	1772	1074	1912	1913
S-ribosyl-L-homocysteine-nega	211	100	133	184	399	477	4202
succinate C12	1127	1157	1216	1410	1462	2843	5864
threonine-CBZ	26216	26367	26253	29445	33458	57961	105690
trptophan-CBZ	1513	2050	2724	2457	2583	3597	6201
tyrosine-CBZ	2371	3713	5652	4972	5322	6170	13178
UDP-D-glucose	115632	108530	107536	117825	146578	163277	199696
UDP-D-glucuronate	16744	20485	19385	20533	35945	45491	66319
UDP-N-acetyl-glucosamine	27313	21891	21032	29237	31772	44167	50360
UDP-nega	254	603	238	403	343	1191	1286
UTP-nega	8401	10201	12368	10944	13567	19370	25292
valine-CBZ	50099	32507	33477	38842	46181	74326	91058

Trimethoprim (4 µg/ml) + no supplements replicate 1 raw data							
Time (min)	0	1	5	15	30	60	120
Optical density	0.540	0.540	0.550	0.560	0.580	0.620	0.700
1,3-diphosphateglycerate	2997	3315	3415	4020	4931	4794	8549
2,3-dihydroxybenzoate	500	261	7620	19379	35377	36234	70166
3-phosphoglycerate	22221	19921	20112	20050	21434	23095	38456
5-phosphoribosyl 1-pyrophosphate	14977	17610	30232	43222	35132	53347	72824
6-phospho-D-gluconate	14657	19672	6635	1159	944	1727	1937
acetyl-CoA-nega	13161	18287	11502	14895	17739	22252	26720
acetylphosphate	17501	11607	10560	16013	21469	33107	69303
aconitate	14248	11008	14593	15067	15985	22198	29556
ADP-D-glucose	545	123	238	100	229	100	100
ADP-nega	2940	2611	1727	1655	1340	950	1654
a-ketoglutarate	17480	14965	17002	16938	19231	15053	19595
alanine-CBZ	91409	73283	152856	244694	183925	259687	226900
AICAR	100	100	9223	1811	1921	815	2970
arginine-CBZ	4353	2120	24466	24452	34651	50981	58462
asparagine-CBZ	14603	10106	78996	111943	130179	160082	226113
aspartate-CBZ	84051	62108	129983	43302	151630	707947	827978
ATP-nega	37203	53085	45024	34520	37592	38546	32069
carbamoyl-phosphate	752	913	2542	2226	1773	1853	3081
citrate	9077	10752	12004	10341	8849	13890	23121
citrate/isocitrate	66722	83098	89333	91650	94544	127085	205365
citrulline-CBZ	9307	5141	5798	8079	9219	13281	12971
coenzyme A-nega	100	255	647	938	1060	1021	1687
CTP-nega	9243	15567	17681	20429	23849	18651	14209
dATP-nega	18662	18471	14967	20181	21006	23351	19611
dCTP-nega	757	2503	2806	3547	1744	2506	2290
dGDP	1188	1300	1041	295	669	721	327
D-glucono-δ-lactone-6-phosphate	1989	2611	2740	2789	2942	2352	2653
D-glyceraldehyde-3-phosphate	9908	13439	16075	14850	13574	15559	23264
dihydroorotate	24451	20420	16683	20846	19106	19235	44225
dihydroxy-acetone phosphate	8073	13891	15170	14786	15750	16438	20439
D-sedoheptulose-7-phosphate	6785	5239	3433	2484	3002	4441	6322
dTTP-nega	13184	15131	9618	4000	1609	1247	2469
dUMP-nega	152	599	19236	34139	39459	35163	24903
fructose-1,6-bisphosphate	21277	31934	30639	24111	21726	26606	35893
fructose-6-phosphate	643	1135	1381	1520	1512	1451	2441
fumarate C12	2201	2152	2134	1971	1885	2443	3041
geranyl-PP	3359	5907	5852	4046	4666	3915	4435
glucono-δ-lactone	1619	1778	2426	2504	1713	2379	2149
glucose-1-phosphate	2399	2243	2651	2320	2533	4911	6338
glutamate-CBZ	4215818	2683447	2825587	921013	2346400	9294668	10116848
glutamine-CBZ	127041	76934	553508	912980	1000679	932723	1337928
glutathione disulfide-nega	13293	19706	10344	9354	9781	8517	12861
glutathione-nega	75411	93410	125592	125772	108384	114434	136660
glutathionine-MMTS	11777	13390	9890	12553	11056	12864	100
glycerate	3937	918	498	341	571	176	275
glycine-CBZ	98750	71998	17788	8142	6897	10163	14446
GTP-nega	31448	37323	21256	40715	47079	29580	21148
hexose-phosphate	9837	9948	10814	13894	12376	15939	22840
histidine-CBZ	10889	8707	9479	100	511	12217	9331
homocysteine-MMTS	2644	100	2009	465	9664	14077	13479
hydroxyphenylpyruvate	100	100	109	475	760	831	1489

isocitrate	771	602	779	596	776	1554	2779
lactate	4770	2967	2742	2825	3130	3875	2577
leucine/isoleucine-CBZ	47598	23938	113102	63978	126040	148096	80712
lysine-CBZ	32436	14046	107586	96056	220088	619334	854432
malate	32017	31172	42410	43874	42603	51128	74564
methionine-CBZ	7240	4281	7613	7451	8276	14985	18636
myo-inositol	6656	3959	6401	4730	5010	5496	6305
NAD+_nega	23421	29977	23958	39139	32346	41689	58515
NADP+_nega	3513	3837	4553	4063	4661	4927	6122
NADPH_nega	551	1096	2320	1151	691	1541	2223
ornithine-CBZ	2652	1873	2956	3632	3248	6177	18126
orotate	20341	10679	6544	6603	6812	6442	5556
oxaloacetate	4409	5383	5229	5009	5432	4738	4014
pantothenate	100	100	100	493	908	2297	3749
phenylalanine-CBZ	255	238	2321	868	4287	9039	10203
phenylpyruvate	1140	862	1902	5510	4042	5300	8354
phosphoenolpyruvate	953769	744292	532879	709707	745701	727454	598588
p-hydroxybenzoate	3378	2158	2415	2992	3698	4269	8870
prephenate	441	319	2134	3470	6323	8750	11456
proline-CBZ	51173	54273	31920	16720	26650	42331	46459
pyruvate	458	233	128	170	492	2005	8032
quinolinate	12459	8705	7637	7815	7328	6314	6087
ribose-phosphate	6495	8318	8311	4280	4088	6021	10682
serine-CBZ	22600	11386	11716	22186	13648	15672	21302
shikimate-3-phosphate	2942	2270	3739	3516	2878	3529	3456
sn-glycerol-3-phosphate	4442	4349	2668	2909	3105	4294	4435
S-ribosyl-L-homocysteine-nega	581	469	1521	1061	1221	1558	1547
succinate C12	23197	23296	34298	31351	29548	24305	36348
threonine-CBZ	30025	18032	62417	89860	97111	108918	106794
trehalose	8295	3189	836	1434	848	666	2377
trehalose 6-Phosphate	569	311	172	145	100	1012	2883
trptophan-CBZ	2025	536	4033	3433	4211	8152	7887
tyrosine-CBZ	2143	2722	23201	20776	39780	52918	46906
UDP-D-glucose	198712	271189	224508	202927	207389	223406	242793
UDP-D-glucuronate	80429	94931	88462	96267	95968	87211	73988
UDP-N-acetyl-glucosamine	48926	67036	52169	52729	53114	44948	43403
UDP-nega	653	717	1013	692	1332	890	718
UTP-nega	28892	49990	56658	66634	66980	64525	60037
valine-CBZ	39065	20891	207605	751506	1173582	1592525	436179
xanthosine	941	350	183	603	446	626	628

Trimethoprim (4 µg/ml) + no supplements replicate 2 raw data							
Time (min)	0	1	5	15	30	60	120
Optical density	0.520	0.520	0.531	0.543	0.565	0.610	0.700
1,3-diphosphateglycerate	1587	1212	617	2762	2665	3160	7953
2,3-dihydroxybenzoate	590	212	6027	10422	19845	31015	65313
3-phosphoglycerate	14725	12174	10425	13289	16191	20614	34116
5-phosphoribosyl 1-pyrophosphate	2588	2386	3826	9702	9443	14748	11603
6-phospho-D-gluconate	15882	9130	3333	2094	1907	1700	2787
acetyl-CoA-nega	8247	6434	2835	7405	6934	15551	12642
acetylphosphate	7858	4856	1673	3929	4908	10717	27954
aconitate	5797	3907	3828	7453	8068	8318	13802
ADP-D-glucose	147	135	143	100	100	100	100
ADP-nega	1709	1361	1238	782	449	688	1179
a-ketoglutarate	9890	6115	5289	7112	9323	8417	9647
alanine-CBZ	121158	112034	156790	271805	229873	205521	160614
AICAR	100	100	1856	3183	3811	9655	12228
arginine-CBZ	2440	1257	6020	16735	21688	20344	12353
asparagine-CBZ	15367	9095	18526	42163	52513	49220	62201
aspartate-CBZ	34339	36879	104217	211275	233787	306262	376778
ATP-nega	20288	15981	10379	11393	13614	8408	7722
carbamoyl-phosphate	719	484	965	415	1044	1107	484
citrate	10412	5610	6197	6902	8281	11423	18217
citrate/isocitrate	81103	51970	45448	77192	71639	95457	151658
citrulline-CBZ	5402	5540	1975	2023	3259	3675	4102
coenzyme A-nega	1083	279	164	785	439	1254	815
CTP-nega	4716	4098	5639	4184	5371	4506	2202
dATP-nega	2942	2128	1290	2616	2333	2794	2102
dCTP-nega	383	301	583	873	616	227	150
dGDP	5649	4110	3741	3219	3174	3192	1822
D-glucono-δ-lactone-6-phosphate	126	179	275	241	100	215	332
D-glyceraldehyde-3-phosphate	7064	6135	6807	9622	10267	14131	22775
dihydroorotate	26693	19607	18139	16517	14725	23627	38878
dihydroxy-acetone phosphate	7500	5889	7261	10730	10867	13286	22310
D-sedoheptulose-7-phosphate	5419	3187	2721	3065	3566	4548	5625
dTTP-nega	6653	5460	3376	2221	1272	1318	1692
dUMP-nega	139	520	13599	22140	24702	17591	12665
fructose-1,6-bisphosphate	26258	27764	18923	19960	15299	22344	49447
fructose-6-phosphate	648	318	701	971	972	1280	2093
fumarate C12	701	337	1120	1277	1296	1677	2065
geranyl-PP	5183	2776	100	3870	4010	3837	2560
glucono-δ-lactone	3610	1825	1529	1532	1597	1520	1560
glucose-1-phosphate	2076	2556	2184	3236	3544	3897	4830
glutamate-CBZ	1548576	1758448	1716525	2778981	3176899	3722875	3224124
glutamine-CBZ	68898	69658	93565	165714	208829	256015	244198
glutathione disulfide-nega	12623	10486	15185	12121	10647	13111	9453
glutathione-nega	97185	101507	65571	113655	105114	126738	104358
glutathionine-MMTS	25606	28495	15895	32708	28062	30183	28029
glycerate	384	377	265	360	443	376	228
glycine-CBZ	117666	82805	19092	9258	6895	8349	11175
GTP-nega	10522	8530	3582	8690	10903	8127	3531
hexose-phosphate	7362	5963	6549	10285	10543	14885	26273
histidine-CBZ	5930	3934	4951	3651	2806	2440	2860
homocysteine-MMTS	1643	1241	1725	5561	10159	10900	7085
hydroxyphenylpyruvate	182	100	100	100	649	809	1138

isocitrate	238	368	18	120	276	183	934
lactate	4449	2635	3436	1802	1295	1689	4324
leucine/isoleucine-CBZ	29647	21367	34395	63860	57756	51031	20530
lysine-CBZ	22795	17204	28441	126624	190714	222054	167235
malate	12823	5912	7468	18748	17970	23439	46106
methionine-CBZ	5398	3733	2123	5119	5789	7791	7251
myo-inositol	10689	3119	6280	4942	5277	5642	3638
NAD+_nega	3662	2789	1453	3732	3536	5730	7161
NADP+_nega	1145	556	664	531	330	710	291
NADPH_nega	920	709	145	993	1762	1312	1455
ornithine-CBZ	3340	4124	397	3418	2102	1019	5980
orotate	12147	4043	3710	2864	4460	4419	2889
oxaloacetate	2399	2344	1734	2277	1944	2472	2581
pantothenate	100	100	100	100	351	1966	1969
phenylalanine-CBZ	100	100	900	2051	1647	2032	2435
phenylpyruvate	1792	1236	2783	4053	5136	7722	9064
phosphoenolpyruvate	171872	171358	133174	130869	142814	148261	176430
p-hydroxybenzoate	3182	1239	3066	1465	2335	4676	7144
prephenate	122	126	11	381	246	1060	1703
proline-CBZ	76497	57549	36182	49274	46805	44365	40796
pyruvate	528	115	166	195	129	1440	8051
quinolinate	4411	3032	10575	2999	3834	3684	2355
ribose-phosphate	7336	5170	4991	4860	3778	5159	13295
serine-CBZ	16796	10088	3938	6445	5709	7714	5227
shikimate-3-phosphate	123	113	197	215	170	164	199
sn-glycerol-3-phosphate	3597	2088	1585	2220	2937	2847	4451
S-ribosyl-L-homocysteine-nega	768	537	363	767	1197	826	503
succinate C12	28429	27321	28711	28107	29018	29445	33887
threonine-CBZ	23131	16268	21030	36930	44763	44247	25233
trehalose	1137	293	557	1162	607	3131	23670
trehalose 6-Phosphate	343	571	121	323	411	2260	10064
trptophan-CBZ	496	147	579	1384	1069	2013	1267
tyrosine-CBZ	668	983	8090	15707	15782	25560	18010
UDP-D-glucose	174507	119391	61208	120254	138431	167986	131054
UDP-D-glucuronate	73438	70366	65031	71677	71574	66323	66775
UDP-N-acetyl-glucosamine	46888	37906	19471	33968	40576	38772	29797
UDP-nega	1362	609	1267	656	505	558	665
UTP-nega	17868	14519	15598	21253	23180	22675	17135
valine-CBZ	66770	61540	264970	804245	886195	816448	129489
xanthosine	1408	374	870	180	213	374	396

Trimethoprim (4 µg/ml) + no supplements replicate 3 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.500	0.500	0.507	0.515	0.530	0.559	0.618
1,3-diphosphateglycerate	437	959	1855	1393	2720	3946	8439
2,3-dihydroxybenzoate	2287	2169	8457	33887	75411	101622	164563
3-phosphoglycerate	4383	6100	4224	4273	5622	5853	6914
5-phosphoribosyl 1-pyrophosphate	19898	21731	60761	53046	75417	92788	83288
6-phospho-D-gluconate	7992	6722	3661	1412	662	1469	1830
acetyl-CoA-nega	10311	10999	10240	9716	13237	15743	15978
acetylphosphate	7763	10313	7643	9087	10921	20362	39543
aconitate	14462	10095	17239	23145	22504	21733	23258
ADP-D-glucose	488	773	919	444	151	100	100
ADP-nega	7817	4993	3945	2495	2442	2262	922
a-ketoglutarate	21273	14191	17632	16921	20764	19691	16731
alanine-CBZ	419480	315518	439157	839433	843679	774798	658447
AICAR	100	100	1753	3550	3636	4150	5151
arginine-CBZ	11575	6089	14920	36298	46078	51998	33026
asparagine-CBZ	87309	34034	66128	181788	218282	222463	248648
aspartate-CBZ	290612	151484	445902	1013238	1245456	1525494	1676500
ATP-nega	68852	71615	77740	51514	49595	36986	30331
carbamoyl-phosphate	1733	1909	2736	2071	2977	2454	1507
citrate	28047	28781	50564	44047	43153	40446	35033
citrate/isocitrate	256144	253875	453376	414333	359896	352736	335055
citrulline-CBZ	25934	16712	11876	12729	13678	14004	18667
coenzyme A-nega	100	366	339	860	1063	1883	1532
CTP-nega	21954	19600	25681	17556	23545	18186	11179
dATP-nega	5973	7540	7669	5566	4785	6698	5297
dCTP-nega	3115	3412	3847	2892	2796	1487	1601
dGDP	400	274	812	522	107	177	100
D-glucono-δ-lactone-6-phosphate	2678	2585	3181	3170	3159	3693	3605
D-glyceraldehyde-3-phosphate	7270	7102	9440	8857	9508	11638	18658
dihydroorotate	78077	54775	36625	15907	19775	34686	70290
dihydroxy-acetone phosphate	6878	6516	8906	9681	9746	12883	17987
D-sedoheptulose-7-phosphate	4507	4032	4346	3360	3987	3915	5256
dTTP-nega	18788	18891	20637	8722	6577	5077	3988
dUMP-nega	121	353	9308	11522	11264	9229	6701
fructose-1,6-bisphosphate	84571	96510	99941	48224	55203	67692	137267
fructose-6-phosphate	991	375	804	662	1019	1375	2823
fumarate C12	656	877	782	954	1129	1638	1387
geranyl-PP	1454	5647	1474	1429	1352	1706	1896
glucono-δ-lactone	2031	2480	3577	4777	4556	3107	2994
glucose-1-phosphate	2131	1738	1297	1088	2474	2036	2264
glutamate-CBZ	10111722	7757925	8576231	13761355	15740585	16708694	16079442
glutamine-CBZ	366167	266531	331810	719843	844493	835117	768809
glutathione disulfide-nega	39729	33691	23631	22621	21088	12481	6997
glutathione-nega	282704	271078	297752	237982	225966	153388	113737
glutathionine-MMTS	16001	17803	14184	15517	11144	9506	7027
glycerate	2489	1765	1547	384	941	789	385
glycine-CBZ	42401	22915	5181	2948	3620	7379	4364
GTP-nega	31778	35559	29531	27027	28510	32016	21127
hexose-phosphate	6551	6509	8162	8172	10970	10385	15051
histidine-CBZ	26699	15820	18001	13646	13726	13760	10637
homocysteine-MMTS	1913	643	2172	13714	15391	15038	13798
hydroxyphenylpyruvate	298	100	182	447	965	1261	1890

isocitrate	397	221	374	67	478	502	905
lactate	11510	7741	9545	5744	7194	10251	8090
leucine/isoleucine-CBZ	99431	48494	169690	359604	383950	301485	152425
lysine-CBZ	281128	135831	294873	1697227	2396043	2734920	2614651
malate	27883	23818	31569	28715	41012	46679	56126
methionine-CBZ	32159	17872	15435	9341	10306	16728	26654
myo-inositol	5604	14199	13548	9694	12269	14920	12842
NAD+_nega	29790	26912	36137	36004	42757	50264	63949
NADP+_nega	31321	29247	28028	18290	25511	31621	24537
NADPH_nega	2304	2836	4322	2923	4384	3988	5021
ornithine-CBZ	39109	21324	11910	13184	15842	18461	41327
orotate	27194	15096	10336	9351	10006	9899	7647
oxaloacetate	1938	2837	1539	1660	1537	2234	1043
pantothenate	100	100	100	151	569	1612	2503
phenylalanine-CBZ	1572	523	4601	11932	14285	17597	23934
phenylpyruvate	5467	2737	7130	13348	22705	20274	34613
phosphoenolpyruvate	148058	142649	153311	138970	158365	158083	169331
p-hydroxybenzoate	3133	2504	2573	3452	5239	5751	7685
prephenate	1260	295	2895	6552	10293	12830	19166
proline-CBZ	79925	62519	55609	36067	36537	35852	29746
pyruvate	5191	3944	3913	2290	3689	8492	13418
quinolinate	16611	20873	37381	25091	27703	32060	25624
ribose-phosphate	7255	7700	8303	6151	5476	7012	8021
serine-CBZ	65946	27769	12700	15846	18354	23284	20440
shikimate-3-phosphate	1754	1804	1913	2964	2717	2912	3294
sn-glycerol-3-phosphate	4350	3077	2228	2971	2293	3230	2756
S-ribosyl-L-homocysteine-nega	1847	1777	2031	1136	1505	2132	3503
succinate C12	19630	18525	18603	27291	32975	38859	48511
threonine-CBZ	51061	26883	65488	134584	139366	121477	103897
trehalose	11051	4763	2225	1493	918	1226	2963
trehalose 6-Phosphate	100	392	283	152	446	1840	4344
trptophan-CBZ	4414	2795	12458	12725	17788	20934	25093
tyrosine-CBZ	2173	1900	26912	40468	58120	125040	129043
UDP-D-glucose	219214	206440	211509	158921	206383	228481	161101
UDP-D-glucuronate	236408	241370	270508	221237	233604	197161	211586
UDP-N-acetyl-glucosamine	53736	54266	53237	40654	53316	48155	38509
UDP-nega	2748	2735	2490	1458	1319	2158	1723
UTP-nega	35885	38777	55737	47381	57008	52149	41826
valine-CBZ	164599	103454	584146	2251896	2364660	1913519	1084937
xanthosine	1468	1207	480	637	239	344	384

Trimethoprim (4 µg/ml) + no supplements replicate 4 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.570	0.570	0.554	0.566	0.587	0.581	0.740
1,3-diphosphateglycerate	100	100	100	100	172	735	798
2,3-dihydroxybenzoate	2347	1144	28178	93132	98344	100228	75364
2,3-Diphosphoglyceric acid	848	1043	1828	1691	983	6926	6809
2-Hydroxy-2-methylbutanedioic acid	28477	12167	7009	3469	3322	2524	2374
2-Isopropylmalic acid	98750	71998	17788	8142	6897	10163	14446
3-phosphoglycerate	1735	2054	1149	1782	1823	2717	3082
5-phosphoribosyl 1-pyrophosphate	7436	11530	28869	13341	15551	67247	88524
6-phospho-D-gluconate	2757	3072	568	176	9	52	31
acetyl-CoA-nega	12000	13812	7548	8895	10530	14814	13146
acetylphosphate	2754	1951	1874	2068	2906	4158	6247
aconitate	2702	946	1733	1574	1974	2569	3278
adenosine 5'-phosphosulfate	670	419	424	228	90	549	212
ADP-nega	2319	1808	1232	1316	1113	1099	980
alanine-CBZ	202754	201291	539595	1001351	739063	736856	558446
arginine-CBZ	3381	3425	17273	25750	27181	25926	23485
asparagine-CBZ	31999	26465	86964	103940	97624	104869	117341
aspartate-CBZ	161881	190314	645061	612151	633237	632190	710199
ATP-nega	32796	34209	37620	21444	25152	39733	21043
citrate	4855	3503	6505	2279	1416	2344	4188
citrate-isocitrate	35569	28764	47216	15716	16603	27088	36277
citrulline-CBZ	17663	18088	7983	7948	7412	8843	10926
coenzyme A-nega	1662	1257	3935	4925	5892	6089	5509
CTP-nega	10109	9175	16258	9320	11535	20432	14414
dATP-nega	2147	2193	1503	2594	3793	3490	2611
dCTP-nega	1923	2643	3296	2181	1539	2486	1666
D-erythrose-4-phosphate	1116	507	601	920	621	603	885
D-glucono-δ-lactone-6-phosphate	763	807	621	335	480	692	939
D-glyceraldehyde-3-phosphate	285	386	491	172	381	738	457
dihydroxy-acetone phosphate	3776	4171	6029	4658	5945	6598	6952
D-sedoheptulose-7-phosphate	1843	1487	1456	1135	1500	1911	2453
dTTP-nega	4744	4516	2759	206	148	54	36
dUMP-nega	100	519	2577	3472	3515	2875	2233
fructose-1,6-bisphosphate	16795	28995	29146	15884	12329	22838	32039
fructose-6-phosphate	890	897	1954	1470	797	1418	1599
geranyl-PP	5899	5590	3371	3814	4199	4692	4353
glucosamine	15090	13061	16017	10991	14706	11419	13047
glucose-1-phosphate	1060	598	797	240	872	408	450
glutamate-CBZ	7510476	8400106	10168289	10433115	10563452	10353123	10236839
glutamine-CBZ	345534	319835	635593	579260	545132	558992	570757
glutathione disulfide-nega	10942	11645	11728	7403	6332	7328	4885
glutathione-nega	87933	92000	92291	90076	78012	90494	74076
glutathionine-MMTS	2746	2414	2364	1548	1926	1699	1191
glycine-CBZ	26512	6125	1841	977	1545	1746	1212
GTP-nega	9442	10598	7917	5726	7503	17593	13422
hexose-phosphate	9408	5546	8857	7055	7348	11157	11920
homocysteine-MMTS	2553	1698	3035	15039	20635	23044	21920
Indoleacrylic acid	4795	3480	5088	5768	6071	5595	5748
leucine/isoleucine	12184	384	29584	43940	41794	39609	28732
lysine-CBZ	106939	101683	403040	858415	1034497	1107632	1315059
malate	31348	22847	24141	19042	18637	19455	23096
methionine-CBZ	14355	15991	12157	3525	2159	2340	5050

NAD+_nega	19730	19507	22574	21982	26849	36853	37309
NADP+_nega	7934	9289	9713	7369	8902	10683	6307
NADPH_nega	4528	4054	4236	3360	3687	5919	5121
N-Carbamoyl-L-aspartate	7419	4437	413	1161	1410	1211	399
Octulose bisposphate	243	231	293	74	103	88	188
Octulose-Phosphate	427	320	305	383	242	339	551
ornithine-CBZ	15716	12050	6307	7670	6524	7060	8252
pantothenate	100	100	179	1868	1925	2029	2108
phenylalanine-CBZ	616	524	6076	10127	8602	8331	8253
phenylpyruvate	1286	454	2710	2495	3026	5198	5863
phosphoenolpyruvate	280	392	1055	1742	2103	2173	3002
prephenate	304	188	1302	1858	3349	4170	3624
proline-CBZ	65460	54438	34983	32214	31445	35137	29029
Pyrophosphate	1023	434	1109	620	1135	3191	3476
ribose-phosphate	2902	2564	5120	2096	2659	2653	3805
Sedoheptulose bisphosphate	216	211	554	628	638	2393	3793
serine-CBZ	39826	17484	10952	6996	7797	9420	11011
sn-glycerol-3-phosphate	1009	1039	1076	907	550	1261	802
threonine-CBZ	46940	42378	118749	159813	145387	146308	119068
tryptophan-CBZ	2779	2907	15691	14831	13124	14725	13989
tyrosine-CBZ	2968	4193	60299	102189	105447	109141	95969
UDP-D-glucose	125466	149946	104523	83208	97305	137513	130678
UDP-D-glucuronate	48367	43849	55466	45529	49735	49151	49128
UDP-N-acetyl-glucosamine	21074	24202	22302	19317	24125	21216	16342
uracil	100	100	150	627	539	1488	1014
UTP-nega	20146	18526	27667	20467	25032	39886	30891
valine-CBZ	43269	46480	510272	1418130	1152968	1232623	1157927

Trimethoprim (4 µg/ml) + no supplements replicate 5 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.570	0.570	0.554	0.566	0.587	0.581	0.740
1,3-diphosphateglycerate	113	155	244	408	566	101	376
2,3-dihydroxybenzoate	1460	474	25870	99219	104057	75279	70849
2,3-Diphosphoglyceric acid	2156	1353	1144	4647	4330	1890	2972
2-Hydroxy-2-methylbutanedioic acid	31993	14128	6582	3168	2839	2199	2983
2-Isopropylmalic acid	117666	82805	19092	9258	6895	8349	11175
3-phosphoglycerate	2284	2019	2194	1786	2901	1954	3223
5-phosphoribosyl 1-pyrophosphate	26080	16935	27812	46395	42721	19522	37801
6-phospho-D-gluconate	5872	2313	143	82	39	28	26
acetyl-CoA-nega	9478	12374	6502	7889	9334	9610	13505
acetylphosphate	2686	2319	1500	1151	1884	3454	5252
aconitate	2813	1831	2875	1658	1743	2005	3309
adenosine 5'-phosphosulfate	851	1051	246	179	564	119	72
ADP-nega	1855	2215	1244	1294	1166	737	693
alanine-CBZ	159298	160414	448102	890773	792920	742184	504499
arginine-CBZ	2286	3594	16172	23842	25631	27503	26416
asparagine-CBZ	26683	28282	88392	101966	100226	111005	122228
aspartate-CBZ	124053	157579	514280	529058	550739	646683	684513
ATP-nega	59456	51589	45886	39184	31569	19770	21333
citrate	30356	8578	9675	4441	3010	2413	4279
citrate-isocitrate	245922	58804	76605	26781	24303	20983	31366
citrulline-CBZ	16036	18124	7748	9834	8074	9604	11384
coenzyme A-nega	2738	4628	7167	7291	7306	6903	5987
CTP-nega	16232	16460	19811	17118	19773	9414	10905
dATP-nega	3313	2971	2455	4853	4193	3098	2975
dCTP-nega	3337	3466	3607	2620	3111	2159	1299
D-erythrose-4-phosphate	793	1151	689	653	1075	635	541
D-glucono-δ-lactone-6-phosphate	904	455	1047	1033	1099	608	617
D-glyceraldehyde-3-phosphate	706	652	451	623	339	298	436
dihydroxy-acetone phosphate	4331	4568	5855	5466	4400	4245	6927
D-sedoheptulose-7-phosphate	2952	1882	1894	1135	1794	1404	1926
dTTP-nega	7228	5806	4384	507	242	6	32
dUMP-nega	100	566	3384	4026	2578	3654	2353
fructose-1,6-bisphosphate	44532	41880	34707	31368	24113	9880	13061
fructose-6-phosphate	1609	859	1172	981	1333	912	1285
geranyl-PP	4532	4009	4578	3777	4130	4407	3836
glucosamine	16794	19170	16709	20273	19787	13103	20425
glucose-1-phosphate	1375	512	833	729	672	401	323
glutamate-CBZ	6450599	7047712	9228792	9354892	9874103	10546682	10323251
glutamine-CBZ	291825	297310	618436	562835	571957	603699	622588
glutathione disulfide-nega	22410	17952	18096	11598	11779	7780	8389
glutathione-nega	52997	81583	82009	69337	64719	74210	85331
glutathionine-MMTS	1572	2348	2718	2147	1643	2437	2282
glycine-CBZ	23533	6401	2033	1738	1424	1312	1324
GTP-nega	21832	18956	11159	14225	18710	12045	12131
hexose-phosphate	11598	8019	9652	8603	9740	5787	7657
histidine-CBZ	7145	8481	19879	6923	5516	5690	5759
homocysteine-MMTS	2295	1596	2585	12846	14712	17123	28649
Indoleacrylic acid	4074	4581	4480	5167	5583	4917	5741
leucine/isoleucine	7083	7855	19548	30065	26076	25706	25600
lysine-CBZ	91727	99928	418649	780882	1023173	1203547	1390620
malate	38364	22695	21885	16539	19774	20429	22266

methionine-CBZ	17263	17187	13170	3307	2771	2723	6147
NAD+_nega	19928	22560	24806	23734	29839	33543	41468
NADP+_nega	9783	13006	12897	12796	11047	6500	5770
NADPH_nega	4109	2905	4155	3390	2971	4080	3770
N-Carbamoyl-L-aspartate	8280	5307	194	1779	1086	1121	1047
Octulose bisposphate	914	244	420	669	151	154	186
Octulose-Phosphate	607	270	207	518	223	85	287
ornithine-CBZ	12463	11925	7083	7754	6799	10097	8940
pantothenate	100	135	187	1406	2301	2202	3046
phenylalanine-CBZ	453	837	4931	8330	9603	6257	7594
phenylpyruvate	1905	712	2628	4051	4035	3932	4661
phosphoenolpyruvate	1347	801	2565	2194	1835	2316	2776
prephenate	147	264	1578	2680	2386	2845	3399
proline-CBZ	53081	50588	24122	27071	26697	29317	25387
Pyrophosphate	1901	1975	2107	3128	3320	1200	2236
ribose-phosphate	2746	2802	3319	1991	1682	2200	2933
Sedoheptulose bisphosphate	1689	274	677	1548	1514	662	755
serine-CBZ	29630	17107	8528	8306	8006	9047	10876
sn-glycerol-3-phosphate	2570	1953	1165	928	851	895	1043
threonine-CBZ	35599	38581	98273	141323	131922	135108	120023
tryptophan-CBZ	2376	3093	13532	15331	12971	12376	11545
tyrosine-CBZ	3525	4745	60140	94905	100284	88556	91361
UDP-D-glucose	138166	146101	103988	79059	95645	120853	128711
UDP-D-glucuronate	49832	60022	61188	51225	49086	34706	41082
UDP-N-acetyl-glucosamine	26842	25337	18174	20159	17738	17800	17898
uracil	100	100	100	724	797	1031	1553
UTP-nega	31115	26219	31629	36504	36054	28893	29784
valine-CBZ	46456	55886	463794	1455661	1264260	1271431	1258268

Trimethoprim (4 µg/ml) + 0.3 mM thymine replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.418	0.418	0.424	0.431	0.443	0.469	0.519
1,3-diphosphateglycerate	1543	743	603	539	1096	1013	1775
2,3-dihydroxybenzoate	626	339	6449	22571	50052	126241	173598
2,3-Diphosphoglyceric acid	9072	4551	4968	4542	3672	8167	11756
2-dehydro-D-gluconate	11850	8932	6312	6675	7938	5469	5679
2-Hydroxy-2-methylbutanedioic acid	112427	31869	26827	24377	20492	21223	18759
2-Isopropylmalic acid	330308	211336	159377	54353	40834	60287	157015
2-keto-isovalerate	812	896	1250	1072	1290	1219	852
3-phosphoglycerate	3998	2961	3701	4667	5371	7184	7088
4-Pyridoxic acid	3545	3344	3206	4167	4326	4337	2795
5-phosphoribosyl 1-pyrophosphate	20775	16829	37517	86662	114344	87134	65575
6-phospho-D-gluconate	3910	2458	984	1949	2631	2681	1214
acetyl-CoA-nega	28681	24388	20893	29166	20711	20358	18661
acetylphosphate	2869	1323	1079	2105	2970	4549	11478
aconitate	11020	5053	5325	10810	12152	13561	13578
ADP-nega	6311	4450	5095	2648	2010	983	1088
a-ketoglutarate	7329	5154	5096	6114	8417	6901	5095
alanine-CBZ	574909	572571	546404	827697	870899	1052573	972467
alanine-CBZ-C13N15-IS	545300	648365	583984	510748	554279	615785	504912
AICAR	100	100	1818	6558	7559	6020	4617
arginine-CBZ	4204	5531	9574	20791	25375	25492	12478
Ascorbic acid	37450	11993	11844	20132	39814	54451	74462
asparagine-CBZ	68018	96702	110295	158717	238271	296473	216620
aspartate-CBZ	216632	260322	411399	671206	975551	1213245	1204480
ATP-nega	90553	76195	74646	65782	36080	18406	14457
carbamoyl-phosphate	589	574	471	899	616	258	100
Citraconic acid	10230	6819	6664	3873	2744	2489	2145
citrate	55299	46043	50514	94265	74403	64968	53577
citrate/isocitrate	493890	408476	480904	809996	661201	591465	449289
citrulline-CBZ	23312	27262	23224	17231	18549	30504	45637
coenzyme A-nega	3559	4892	7230	8467	6576	7293	4765
CTP/UTP-nega-IS	37826	59177	50233	39869	44008	42494	54687
CTP-nega	28046	24109	31509	33068	19970	13985	10572
dATP-nega	6107	7476	7243	6028	6393	4796	2641
dCTP-nega	4263	3539	4056	5922	3713	3468	2824
D-erythrose-4-phosphate	2874	2913	3353	2309	2536	2409	3289
dGDP	8794	6321	4601	3002	1619	836	1457
D-glucono-δ-lactone-6-phosphate	4112	4296	3097	3428	4112	4011	2585
D-glyceraldehyde-3-phosphate	3372	2871	3628	3019	4727	6658	12330
dihydroxy-acetone phosphate	3067	2569	4087	3913	5204	8180	12189
D-sedoheptulose-7-phosphate	9788	6793	6739	7902	7267	9197	6138
dTDP-nega	1626	1255	855	407	414	305	276
dTTP-nega	28896	25528	25342	22396	16136	9690	10182
dUMP-nega	100	100	944	2199	1552	1194	1303
fructose-1,6-bisphosphate	93187	101114	102347	92171	104293	132186	224526
fructose-6-phosphate	2012	1609	1651	3359	2841	4261	4828
geranyl-PP	26317	27902	26907	25166	26196	29385	25544
glucose-1-phosphate	1516	1329	1334	1240	2266	3409	2846
glucose-6-phosphate	7376	4400	5293	5188	10226	13486	10516
glutamate-CBZ	11855970	13473630	13386013	13341201	14888630	15387416	13347140
glutamate-CBZ-C13N15-IS	110393	111396	103585	79313	82075	94099	83088
glutamine-CBZ	634987	968715	948506	1277343	1755392	1882134	1372080

glutathione disulfide-nega	81272	77770	70058	71391	60062	30700	17853
glutathione-nega	192052	154576	166955	148411	122837	81755	49221
glycine-CBZ	50010	38682	18958	6292	4851	5535	6262
GTP-nega	40080	33377	33695	25694	21267	19775	15237
hexose-phosphate	19154	15581	15998	23254	31558	40585	43050
histidine-CBZ	12224	12317	12989	15496	7479	4797	3575
homocysteine-MMTS	3031	2584	4858	39710	36907	43392	33073
IDP-nega	1614	725	1045	578	202	451	163
Indoleacrylic acid	1892	1224	1936	1456	2228	1943	1696
lactate	10096	3930	4281	4037	4281	5857	3254
leucine/isoleucine-CBZ	165332	151483	129343	269611	577335	805855	758083
lysine-CBZ	327312	456806	544224	1179693	2682760	3288799	3111280
malate	17040	14726	17235	27246	34565	44312	38050
Maleic acid	1178	1074	2125	917	1268	1025	1256
methionine-CBZ	29776	31564	28109	13097	12922	14369	21965
Methylmalonic acid	21441	17615	18258	21197	30288	34220	34969
N-Acetyl-L-alanine	353	243	100	189	100	100	303
NAD+_nega	44492	40635	39258	45872	49654	59933	63295
NADP+_nega	28808	32150	25230	34715	28703	21450	17953
NADPH_nega	4884	3281	2597	2839	3661	4614	3019
N-Carbamoyl-L-aspartate	1635	997	334	477	100	100	100
ornithine-CBZ	41192	56315	47743	30197	28985	57296	137987
orotate	18879	9177	5707	4661	3115	2483	1575
pantothenate	100	100	100	160	407	1468	1031
phenylalanine-CBZ	1079	584	3414	6696	9178	18730	28025
phenylpyruvate	592	163	631	1930	2285	6268	7390
phosphoenolpyruvate	201	990	612	2455	3603	4798	5863
p-hydroxybenzoate	1018	187	537	585	1008	867	891
prephenate	599	100	665	2056	3778	5939	7231
proline-CBZ	94444	60105	66628	54238	32476	21704	21564
pyruvate	10764	5499	6107	7446	10683	12903	14043
quinolinate	20599	19146	18407	22401	17144	16932	20283
ribose-phosphate	7192	5451	6074	10558	13974	11875	9523
S-adenosyl-L-methionine MMTS	3232	1338	2504	1455	273	1324	2624
S-adenosyl-L-methionine pos	4990	1497	2874	1835	1090	656	4654
serine-CBZ	35389	35670	19350	19867	17977	18704	15649
sn-glycerol-3-phosphate	3285	2510	2307	2620	1573	2472	2514
S-ribosyl-L-homocysteine-nega	1175	1073	1399	949	543	1503	1656
succinate C12	272	355	294	750	569	994	585
threonine-CBZ	109540	116588	148443	299689	284278	239884	193071
threonine-CBZ-C13	9674	12716	10341	10223	11168	12186	9256
trehalose 6-Phosphate	436	471	134	194	818	3822	5995
trptophan-CBZ	7979	6289	11237	18891	22097	28783	35600
tyrosine-CBZ	8451	5077	18697	52116	81952	109308	259939
UDP-D-glucose	165862	138846	136713	144530	160355	162983	132986
UDP-D-glucuronate	78064	68164	83746	71114	51994	62631	54544
UDP-N-acetyl-glucosamine	36574	31849	26506	28325	23020	24946	24239
UDP-nega	6138	3324	3966	2220	1947	1639	1443
UTP-nega	49834	40043	51550	50193	39036	36385	29138
valine-CBZ	387170	449118	433285	974096	1296242	1268128	584239

Trimethoprim (4 µg/ml) + 0.3 mM thymine replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.418	0.418	0.424	0.431	0.443	0.469	0.519
1,3-diphosphateglycerate	100	253	79	323	339	670	2823
2,3-dihydroxybenzoate	496	192	4651	15534	44016	107998	171689
2,3-Diphosphoglyceric acid	2064	1806	961	2445	4019	6184	13054
2-dehydro-D-gluconate	7734	6588	7220	6093	7755	7066	6496
2-Hydroxy-2-methylbutanedioic acid	94352	36840	25860	25091	22692	20803	20362
2-Isopropylmalic acid	311023	233084	146428	55031	47467	57784	173910
2-keto-isovalerate	1139	1113	1168	1713	1585	1923	966
3-phosphoglycerate	3571	3683	3751	3307	4886	7263	9764
4-Pyridoxic acid	3494	3517	3471	4433	3572	3665	4171
5-phosphoribosyl 1-pyrophosphate	18141	22181	36012	87219	115232	96344	68917
6-phospho-D-gluconate	2961	2496	1184	1321	2434	2699	1220
acetyl-CoA-nega	15566	13855	15832	12965	12794	11133	11824
acetylphosphate	1226	1064	1012	1753	1971	2548	5630
aconitate	10387	4879	5077	11480	12849	11834	13156
ADP-nega	5640	5374	3010	2592	1248	1036	546
a-ketoglutarate	7452	6860	5721	6988	9634	7179	6124
alanine-CBZ	550731	547680	490582	834200	989886	954524	849786
alanine-CBZ-C13N15-IS	508224	598411	560511	509665	537421	495402	474827
AICAR	100	100	848	5495	8587	8232	3803
arginine-CBZ	3658	7036	8570	20467	24767	22083	12539
Ascorbic acid	27920	14877	10106	30640	39247	52648	69245
asparagine-CBZ	61081	86877	95929	153208	229624	213236	195217
aspartate-CBZ	188827	253150	323743	555349	837304	928228	1144565
ATP-nega	87144	102720	75101	70191	36786	24840	16570
carbamoyl-phosphate	226	221	341	471	560	398	100
Citraconic acid	10101	7714	4588	3890	2844	2446	1561
citrate	46362	51595	45075	98787	85828	65610	49234
citrate/isocitrate	408957	431015	421739	818724	722009	621882	467542
citrulline-CBZ	19492	24806	19976	12687	16545	26810	44070
coenzyme A-nega	5731	6836	8672	10971	9260	10707	7518
CTP/UTP-nega-IS	46196	47457	37766	42839	50466	47903	51502
CTP-nega	25864	34432	31241	32555	23828	16738	8948
dATP-nega	5613	9623	7464	7236	6395	4846	3521
dCTP-nega	5184	6623	4958	5640	3542	4177	2755
D-erythrose-4-phosphate	2531	2530	3689	3074	3281	2775	2993
dGDP	6161	5509	3322	2850	1894	1618	928
D-glucono-δ-lactone-6-phosphate	2291	3529	3106	3045	2961	2523	2948
D-glyceraldehyde-3-phosphate	1938	2080	2449	2899	4121	6275	11311
dihydroxy-acetone phosphate	1467	2132	2888	3806	5184	5605	12281
D-sedoheptulose-7-phosphate	8132	7696	6235	7715	6679	7823	6478
dTDP-nega	1640	881	914	355	844	504	384
dTTP-nega	30456	32088	27319	20474	14629	13303	10401
dUMP-nega	100	100	548	1999	2131	923	730
fructose-1,6-bisphosphate	74184	111699	109357	87086	95249	134133	217794
fructose-6-phosphate	2278	1757	1564	2349	2061	3805	4340
geranyl-PP	25380	24809	25598	25019	25658	25337	24693
glucose-1-phosphate	1483	1834	1345	1841	1876	2407	2159
glucose-6-phosphate	5949	5436	3675	6371	8173	9602	10853
glutamate-CBZ	10931208	12550818	12342542	13080191	14383218	13225283	12700362
glutamate-CBZ-C13N15-IS	98317	92809	96361	84138	87149	83550	88431
glutamine-CBZ	609476	899602	971146	1282378	1758483	1606659	1195374

glutathione disulfide-nega	154937	178378	175324	149444	123094	62116	33388
glutathione-nega	42491	52123	42528	47259	30374	35307	17765
glycine-CBZ	43270	47941	27198	3763	2845	4208	5259
GTP-nega	37566	39515	34868	27340	23473	25165	19754
hexose-phosphate	16673	16436	15981	18487	28088	31789	38114
histidine-CBZ	10119	12955	18539	8140	4226	4102	3325
homocysteine-MMTS	4350	1885	3505	29048	31483	29406	
IDP-nega	963	1476	887	326	102	185	115
Indoleacrylic acid	1403	1359	1867	2099	1634	1705	1550
lactate	8518	5096	2938	4818	4909	5314	5443
leucine/isoleucine-CBZ	139850	138818	110380	260419	574460	811982	682184
lysine-CBZ	278594	471183	519174	1258795	2701546	2787737	3085092
malate	14788	18774	15132	27884	39192	42576	40068
Maleic acid	1425	1964	1231	1867	1017	2135	875
methionine-CBZ	27603	32061	25334	11846	8793	11554	17697
Methylmalonic acid	22049	20444	20339	24124	31602	40203	44048
N-Acetyl-L-alanine	280	260	347	137	135	100	107
NAD+_nega	40116	49504	51731	58531	66973	67659	71551
NADP+_nega	26516	34465	29498	36186	30082	31918	22397
NADPH_nega	4034	2799	3698	3136	5479	2306	3299
N-Carbamoyl-L-aspartate	1564	2216	512	416	637	259	100
ornithine-CBZ	39942	61216	123255	25801	28313	40256	126433
orotate	21415	11030	6765	4245	3088	1472	1855
pantothenate	100	100	100	100	902	1177	1500
phenylalanine-CBZ	897	1009	2773	7073	8966	16442	25896
phenylpyruvate	728	100	100	1514	3337	6039	8284
phosphoenolpyruvate	702	591	1376	1718	3521	4472	7019
p-hydroxybenzoate	1320	520	415	827	948	1336	2206
prephenate	536	154	509	2062	4776	5734	10431
proline-CBZ	87557	71008	61130	45663	30758	21619	20575
pyruvate	11457	5691	5879	8444	8778	12899	14669
quinolinate	16751	18614	18111	20134	21996	18718	18375
ribose-phosphate	6189	5364	4662	8468	12467	11359	9824
S-adenosyl-L-methionine MMTS	1610	1195	1597	230	550	735	
S-adenosyl-L-methionine pos	2895	703	2477	574	100	868	3183
serine-CBZ	27894	35824	39645	11513	12412	13369	13049
sn-glycerol-3-phosphate	2060	2403	2025	2217	1809	2429	2833
S-ribosyl-L-homocysteine-nega	1178	1163	1575	337	437	865	1085
succinate C12	397	288	399	597	1012	827	1379
threonine-CBZ	85067	112919	137005	245138	243760	199403	161058
threonine-CBZ-C13	8798	11736	8771	11010	9939	9315	9181
trehalose 6-Phosphate	235	100	100	312	953	3433	5019
trptophan-CBZ	6967	6664	10631	16913	19279	26585	35955
tyrosine-CBZ	9315	5747	22220	69495	78260	201190	276597
UDP-D-glucose	146750	165472	146493	162514	173441	182705	145299
UDP-D-glucuronate	70487	87380	87851	87282	77850	69890	58724
UDP-N-acetyl-glucosamine	35959	36180	31594	28834	31967	27159	27825
UDP-nega	4006	4706	2853	1571	2860	2283	1838
UTP-nega	47774	47006	50317	47544	40156	43535	34127
valine-CBZ	327712	421615	386892	969367	1225059	1041079	571059

Trimethoprim (4 µg/ml) + 0.3 mM methionine replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.560	0.560	0.562	0.563	0.567	0.574	0.588
1,3-diphosphateglycerate	6232	3821	3514	3558	3195	3602	5829
2,3-dihydroxybenzoate	5705	5577	267671	468035	427043	362578	469299
2,3-Diphosphoglyceric acid	30023	20671	17637	15342	17571	18205	28066
2-Isopropylmalic acid	199718	178969	30083	19951	18105	19783	26851
2-oxo-4-methylthiobutanoate	2239	3049	710	383	353	244	191
3-phosphoglycerate	14588	16105	12153	11751	11112	14280	21905
5-phosphoribosyl 1-pyrophosphate	22044	27469	56986	42986	37006	44485	75402
acetyl-CoA-nega	19556	19877	20460	18345	22655	27872	25116
6-phospho-D-gluconate	13810	9465	3876	2044	1216	2026	1587
acetylphosphate	3073	2068	2142	2801	3701	7983	9264
aconitate	7823	7714	6477	7376	4874	6467	4952
ADP-D-glucose	899	379	2043	2275	1022	1829	1217
ADP-nega	3583	4364	3258	2320	2300	2231	1457
a-ketoglutarate	12349	12238	13081	12845	9542	9963	6183
alanine-CBZ	226706	237404	766289	1240956	981917	951475	888335
alanine-CBZ-C13N15-IS	617968	554513	516359	433786	385228	333164	340306
AICAR	100	100	1661	506	820	647	1142
arginine-CBZ	5671	7247	32185	61857	78206	107966	94967
Ascorbic acid	664	504	556	4098	6614	9087	22549
asparagine-CBZ	105860	123151	208783	278590	380213	430447	516182
aspartate-CBZ	249931	340488	888510	1095271	1242660	1434020	1788219
ATP-nega	176845	166845	178220	153891	134839	124171	89245
citrate/isocitrate	423237	532897	644587	444666	422189	342203	462088
citrulline-CBZ	22149	23130	8866	8428	9097	8326	9145
coenzyme A-nega	111	281	1028	1096	1242	1295	3192
CTP/UTP-nega-IS	79164	82371	83989	85188	83607	85398	81155
CTP-nega	63527	64951	92959	64809	57728	59274	45907
dATP-nega	14232	15325	13107	15559	19971	16471	10695
dCTP-nega	11541	13889	14877	12582	11224	10330	7269
dGDP	3577	3440	3256	2037	1846	1156	1357
D-glucono-δ-lactone-6-phosphate	5140	6989	4567	5481	5475	5412	5084
D-glyceraldehyde-3-phosphate	345	304	308	558	605	1130	670
dihydroorotate	797	1255	110	119	107	100	126
dihydroxy-acetone phosphate	220	327	430	327	506	436	745
D-sedoheptulose-7-phosphate	3142	2381	3046	2593	2974	2577	4486
dTTP-nega	29432	36024	23848	6407	5624	1143	1512
dUMP-nega	100	100	3592	5158	4310	4434	4148
fructose-1,6-bisphosphate	59816	96576	121439	101939	77510	50385	79436
fructose-6-phosphate	1306	1670	1555	1693	1446	1506	2982
geranyl-PP	12957	13874	11485	12809	13490	11983	12353
glucose-1-phosphate	175	223	100	190	124	210	100
glucose-6-phosphate	3629	3568	3628	2742	4092	3980	5675
glutamate-CBZ	8449370	9312528	10956352	14264948	15970662	16298036	15004787
glutamate-CBZ-C13N15-IS	184210	177437	126266	125786	125621	115313	118706
glutamine-CBZ	529174	585018	1126789	1250309	1535964	1545130	1514838
glutathione disulfide-nega	41568	42611	45688	28497	24531	11794	8539
glutathione-nega	50343	63716	51830	53303	57327	45367	47545
glycine-CBZ	32631	16715	2067	1720	1910	2561	2776
GTP-nega	97516	98611	42796	53159	48508	52021	50920
hexose-phosphate	12496	11702	13510	12459	11771	15285	21099
histidine-CBZ	13439	14758	72920	47790	13002	14001	16202

homocysteine-MMTS	22620	21275	19203	15205	22525	16809	25398
Indoleacrylic acid	3050	3558	4152	2841	3253	3968	3242
leucine/isoleucine-CBZ	48134	54889	250825	368893	365761	454065	450604
lysine-CBZ	204505	232313	732701	1557215	2389638	2678729	3088513
malate	127	188	145	153	326	196	100
Maleic acid	2707	2771	3057	1649	3335	3271	2620
methionine-CBZ	6099652	6851232	6852053	6945331	7069392	6844121	7007906
NAD+_nega	27300	36229	41651	44107	51993	64937	79804
NADP+_nega	23569	31266	38097	38108	26395	23336	21960
NADPH_nega	5241	6599	5944	6581	5373	7248	6862
N-Carbamoyl-L-aspartate	28100	26045	506	2758	3090	2452	1562
ornithine-CBZ	17061	14566	6423	8160	9033	10017	10128
orotate	21284	11433	4337	6079	7786	7872	4436
phenylalanine-CBZ	272	341	18106	25178	23841	29340	31817
phenylpyruvate	1075	427	5250	7432	10228	11538	16322
phosphoenolpyruvate	1860	2294	3435	5689	5662	8095	14506
p-hydroxybenzoate	746	616	648	967	1008	1121	1639
prephenate	130	100	4814	7948	7809	12460	14034
proline-CBZ	76119	78421	65189	66428	62283	67386	58468
pyruvate	1051	1392	2464	4509	5658	7640	9978
quinolinate	26607	22569	23241	23050	22749	22825	20381
ribose-phosphate	4906	4361	4568	3217	3910	3875	5118
S-adenosyl-L-methionine MMTS	6714	4366	4372	5208	4400	5611	6134
serine-CBZ	44511	31638	14207	18069	22696	33779	50255
sn-glycerol-3-phosphate	404	297	257	264	160	286	263
S-ribosyl-L-homocysteine-nega	1039	431	746	681	1253	830	167
succinate C12	100	100	100	100	100	100	100
threonine-CBZ	108892	106378	198700	234361	224863	222163	192152
trptophan-CBZ	3970	3442	38387	35309	34966	35645	34738
tyrosine-CBZ	3482	5374	222832	350370	375726	376307	397048
UDP-D-glucose	141781	121812	88166	82742	101957	135828	200490
UDP-D-glucuronate	85813	121514	121653	124013	99411	127976	109040
UDP-N-acetyl-glucosamine	30216	36544	32050	33202	31841	26726	25853
uracil	100	100	253	652	784	841	1550
UTP-nega	98222	111514	138447	116152	114553	117530	88559
valine-CBZ	57429	83746	1164638	2352877	2056158	1914005	1632131

Trimethoprim (4 µg/ml) + 0.3 mM methionine replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.560	0.560	0.562	0.563	0.567	0.574	0.588
1,3-diphosphateglycerate	504	378	229	277	913	1028	2299
2,3-dihydroxybenzoate	602	329	24069	38530	34572	34249	47067
2,3-Diphosphoglyceric acid	3417	4532	3272	4179	3917	6913	7204
2-Isopropylmalic acid	171600	131491	22379	14288	13839	14065	18362
2-oxo-4-methylthiobutanoate	2618	2266	1540	555	700	592	181
3-phosphoglycerate	14845	16286	14042	14166	16737	19249	25907
5-phosphoribosyl 1-pyrophosphate	14219	15920	26080	20136	17252	35431	39566
acetyl-CoA-nega	2329	2519	2768	2465	3996	4210	5797
6-phospho-D-gluconate	8946	7221	2875	1309	439	1227	1146
aconitate	8139	9472	8122	8659	7418	8076	7760
ADP-D-glucose	1241	816	553	1606	1352	1139	1352
ADP-nega	2438	1781	1478	737	1558	1031	708
a-ketoglutarate	21800	18071	14436	11114	12709	12481	9428
alanine-CBZ	242811	168256	790072	1051196	1057730	654810	1017277
alanine-CBZ-C13N15-IS	603964	431081	565267	390954	413511	257824	406975
AICAR	100	100	1195	754	1008	1451	1676
arginine-CBZ	8560	7804	36921	58440	70974	92034	84684
Ascorbic acid	1366	481	1848	6683	9711	16345	30134
asparagine-CBZ	136306	135092	243833	299408	335066	452672	416013
aspartate-CBZ	315867	345173	940249	995827	1111258	1322418	1527332
ATP-nega	84974	80420	67196	57552	50694	54123	37835
citrate/isocitrate	143244	158596	168445	124524	119331	97104	115104
citrulline-CBZ	25477	23293	12894	9775	7961	10095	9196
coenzyme A-nega	359	669	734	1719	1328	1987	2805
CTP/UTP-nega-IS	35834	37403	37986	42245	39656	38141	33906
CTP-nega	25033	26089	27119	22507	21518	22575	19723
dATP-nega	7690	5822	5250	5941	7028	8943	4605
dCTP-nega	5095	4722	5121	4187	3935	3313	2649
dGDP	2216	1767	2385	1160	1165	1264	780
D-glucono-δ-lactone-6-phosphate	4193	4999	3332	4763	4457	3882	4171
D-glyceraldehyde-3-phosphate	6600	7278	10445	10755	9587	9416	13447
dihydroorotate	6280	3773	151	2066	1991	916	251
dihydroxy-acetone phosphate	7461	7750	11995	10255	11086	11123	12306
D-sedoheptulose-7-phosphate	4898	2065	3689	2462	3283	3091	4992
dTTP-nega	17674	15664	9497	3325	1485	532	721
dUMP-nega	100	660	12249	14033	14607	17842	10932
fructose-1,6-bisphosphate	12577	17170	19579	16556	13798	13423	15550
fructose-6-phosphate	507	1055	904	746	810	1301	1956
geranyl-PP	13557	13154	13163	12734	12656	12817	13578
glucose-1-phosphate	1809	1349	1505	1632	1768	1259	2600
glucose-6-phosphate	793	975	822	1116	656	742	626
glutamate-CBZ	9014234	9290443	10981384	13273380	14216460	14462832	14438196
glutamate-CBZ-C13N15-IS	226392	220456	135558	150228	141052	125639	122385
glutamine-CBZ	575167	652070	1186493	1261004	1331239	1521836	1302124
glutathione disulfide-nega	100134	94234	88412	55739	37402	26369	13425
glutathione-nega	68992	56514	74786	93211	92645	89260	84470
glycine-CBZ	38412	13274	3298	1452	2945	2241	1394
GTP-nega	37010	32530	12127	15690	15098	22754	16186
hexose-phosphate	7502	7091	9220	9676	9635	9978	14124
histidine-CBZ	13439	14554	67182	38201	12605	7088	12917
homocysteine-MMTS	24256	15315	19774	18045	19317	10770	18246

Indoleacrylic acid	1924	1553	1911	1645	1759	1736	1101
leucine/isoleucine-CBZ	62500	58162	251340	344385	338008	419791	384853
lysine-CBZ	288188	290640	981661	1820617	2276850	2477173	2961156
malate	39898	34207	30342	27317	29825	29792	36555
Maleic acid	2563	3222	3783	3175	3023	3210	2918
methionine-CBZ	6350228	6470275	6903765	5894888	6256065	6118267	6231394
NAD+_nega	39540	38818	39027	41809	50937	59573	67102
NADP+_nega	11512	13285	15863	14822	15338	10939	10733
NADPH_nega	2343	1397	1393	1254	1156	2506	1964
N-Carbamoyl-L-aspartate	11760	11563	518	1192	1421	1710	563
ornithine-CBZ	23414	24772	11854	8310	13974	7751	9409
orotate	23259	13805	3910	3887	6266	7149	6646
phenylalanine-CBZ	261	161	14621	21125	23445	26640	30180
phenylpyruvate	1222	413	6260	7892	12620	11077	18811
phosphoenolpyruvate	714	1680	2801	2904	4008	6717	8444
p-hydroxybenzoate	1358	364	938	815	1186	1532	2080
prephenate	161	300	6107	9496	9888	14727	14560
proline-CBZ	79571	64019	53526	51831	58652	51299	54277
pyruvate	2945	1115	2469	5130	5915	7378	10610
quinolinate	16585	18204	18469	19447	17907	18595	18812
ribose-phosphate	9013	8200	10707	6731	5505	5382	8412
S-adenosyl-L-methionine MMTS	6385	3130	3232	4196	4417	4927	4227
serine-CBZ	49348	34076	19780	14609	24298	27667	34728
sn-glycerol-3-phosphate	4869	3392	2349	2584	2106	2091	2711
S-ribosyl-L-homocysteine-nega	733	357	1062	981	479	182	345
succinate C12	1098	773	1228	511	628	802	542
threonine-CBZ	118324	99819	198460	214858	203094	183543	163728
trptophan-CBZ	3941	4023	31233	32315	31506	26193	29426
tyrosine-CBZ	4115	4508	206018	278347	319329	298526	410689
UDP-D-glucose	270895	249540	177592	171863	209289	298934	330021
UDP-D-glucuronate	78735	80246	75592	68448	83384	78062	90343
UDP-N-acetyl-glucosamine	58156	51995	41723	47503	49019	52591	44588
uracil	100	100	498	1130	1012	1367	1003
UTP-nega	45596	39156	51945	47164	38739	49718	45034
valine-CBZ	81782	83648	1189949	2154140	1867910	1730119	1423238

Trimethoprim (4 µg/ml) + 0.3 mM inosine replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.591	0.658	0.641	0.650	0.593	0.725	0.942
1,3-diphosphateglycerate	100	194	83	668	200	989	460
2,3-dihydroxybenzoate	1315	1315	32933	123599	136382	125491	76911
2,3-Diphosphoglyceric acid	1774	1774	1837	4702	2433	3499	2737
2-Hydroxy-2-methylbutanedioic acid	37696	37696	16825	10635	11561	11548	18785
2-Isopropylmalic acid	75306	75306	16608	8214	9997	13434	19345
3-phosphoglycerate	2675	2675	1431	1933	1418	2032	3265
5-phosphoribosyl 1-pyrophosphate	9788	9788	16793	31783	11747	17225	4886
6-phospho-D-gluconate	4301	4301	674	221	28	185	251
acetyl-CoA-nega	10315	13415	7562	10792	13066	13739	19405
acetylphosphate	3580	2091	1860	2054	2688	4834	4217
aconitate	2920	1234	2476	1432	1658	1827	2748
ADP-nega	2268	2075	1092	1012	1261	1927	2271
a-ketoglutarate	7220	7096	5784	6273	6378	7430	9117
alanine-CBZ	197195	226843	589294	905314	845252	663514	257176
AICAR	100	100	100	326	937	1773	3020
arginine-CBZ	3169	2943	17006	23193	27445	22610	23406
asparagine-CBZ	29596	33772	86924	95715	110764	94713	100013
aspartate-CBZ	154520	175149	510249	521519	590037	458260	364033
ATP-nega	67474	67474	58523	50624	40802	63238	85059
citrate-isocitrate	78072	78072	53389	31590	18089	36368	29747
citrulline-CBZ	13416	14454	7548	8555	10295	16655	27649
coenzyme A-nega	1231	1231	3521	4963	5800	6518	7737
CTP-nega	16253	16253	33508	31644	22299	29240	47861
dATP-nega	3911	5819	3653	6154	6871	8173	8431
dCTP-nega	3516	3516	6118	5173	2728	4488	3309
D-erythrose-4-phosphate	394	462	365	438	361	643	606
D-glucono-δ-lactone-6-phosphate	483	874	643	362	259	723	405
D-glyceraldehyde-3-phosphate	17	348	487	555	428	274	569
dihydroxy-acetone phosphate	3878	5919	6593	6003	5026	5059	5824
D-sedoheptulose-7-phosphate	3178	3368	3011	1971	2129	1580	1457
dTTP-nega	7881	9484	3410	858	100	100	100
dUMP-nega	100	154	4242	4678	5645	5115	5333
fructose-1,6-bisphosphate	32267	48616	25517	26361	9874	19176	6706
glucose-6-phosphate	2393	3899	2668	2397	2275	1965	2049
glutamate-CBZ	7101702	7300401	8962110	9492721	10305719	10471709	10865106
glutamine-CBZ	314834	291437	597628	556149	579279	578229	539470
glutathione disulfide-nega	23515	23515	24592	16481	15149	12044	9170
glycine-CBZ	12107	7643	1640	2774	5231	2340	113644
GTP-nega	35401	35401	19531	29707	22592	32306	35144
hexose-phosphate	11173	11173	7944	9192	6268	8738	6617
histidine-CBZ	7996	7608	14433	8561	10072	6501	7301
homocysteine-MMTS	158	359	1023	5064	7656	7658	4527
hypoxanthine	24330	14554	23911	31789	41912	39807	37582
inosine	259139	383786	384121	329952	340312	295124	311849
leucine-isoleucine-CBZ	37794	37637	97410	171094	181424	145480	1091039
lysine-CBZ	108898	120395	397662	926583	1192395	1327433	1851494
malate	44861	28370	23041	18178	19559	20078	25058
methionine-CBZ	16265	12486	9517	1973	1780	1064	1014
methylnicotinamide	7332	5386	5319	4421	4476	3410	3926
NAD+_nega	23239	23239	26765	32342	33023	43240	62228
NADP+_nega	8771	11136	11608	11941	14453	14449	19876

NADPH_nega	4013	2129	2398	3036	2822	3865	4758
N-Carbamoyl-L-aspartate	23931	23931	2535	2303	4155	5856	5905
ornithine-CBZ	12699	13225	8546	11332	16962	16796	26700
pantothenate	100	113	243	381	985	306	100
phenylalanine-CBZ	933	715	3458	5177	6142	4203	2523
phenylpyruvate	1745	995	2143	3137	3563	3742	5946
phosphoenolpyruvate	946	946	1379	1532	1609	2090	2249
prephenate	341	253	1023	2425	2941	2527	3241
proline-CBZ	66166	55104	35498	34376	38623	69476	143192
Pyrophosphate	3278	3087	1870	3576	1461	4980	2074
pyruvate	664	664	900	844	464	795	921
ribose-phosphate	3813	9598	5462	2632	2296	2476	4127
S-adenosyl-L-methionine	730	215	767	415	165	100	100
Sedoheptulose bisphosphate	845	1351	782	2373	870	1516	419
serine-CBZ	30031	18161	10329	10306	15928	9601	14319
sn-glycerol-3-phosphate	1515	1515	1104	605	1340	1508	1242
succinate	51414	44230	41964	38942	41735	41715	44214
threonine-CBZ	46775	45453	106626	144648	153316	150016	351916
tryptophan-CBZ	3004	2832	13205	13446	12379	9571	9813
tyrosine-CBZ	4212	4435	37192	71559	61796	44966	33443
UDP-D-glucose	122835	125786	98727	75909	100898	138552	196926
UDP-D-glucuronate	63586	63586	63534	61310	49990	47752	71048
UDP-N-acetyl-glucosamine	21984	24959	24880	24087	27897	31009	37617
uracil	100	100	100	762	484	1007	1849
UTP-nega	41734	33706	48229	51327	45502	68625	75561
valine-CBZ	60689	62611	543322	1426822	1378877	1205912	162945
xanthosine	1165	1165	1401	940	1071	972	1279

Trimethoprim (4 µg/ml) + 0.3 mM inosine replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.591	0.658	0.641	0.650	0.593	0.725	0.942
1,3-diphosphateglycerate	163	170	88	205	319	149	470
2,3-dihydroxybenzoate	2894	1845	47684	112048	153615	150619	71039
2,3-Diphosphoglyceric acid	2004	2247	1928	2654	2637	2729	2014
2-Hydroxy-2-methylbutanedioic acid	94362	38507	21386	11971	12508	11747	17565
2-Isopropylmalic acid	104970	80926	16577	8924	9979	11683	18288
3-phosphoglycerate	2880	2803	1208	1420	1991	2107	2131
5-phosphoribosyl 1-pyrophosphate	7667	5575	14589	14059	16911	6994	4813
6-phospho-D-gluconate	5189	3407	605	95	13	83	108
acetyl-CoA-nega	10315	9570	7397	8971	8796	12287	15130
acetylphosphate	3580	1835	1630	1845	2402	2519	2826
aconitate	2920	1769	2290	2308	1973	1717	1420
ADP-nega	2268	2186	1377	951	711	1253	2136
a-ketoglutarate	7220	6892	6786	7059	8114	6873	9206
alanine-CBZ	191104	158456	442108	754808	689862	555735	204264
AICAR	100	100	100	272	1480	2199	3694
arginine-CBZ	3169	2726	14765	21673	23447	21337	20408
asparagine-CBZ	28194	27934	95718	100062	102304	99348	90152
aspartate-CBZ	138907	132709	465775	447516	490697	445528	346944
ATP-nega	55465	55169	52482	42419	45021	60446	74763
citrate-isocitrate	63606	40529	42721	27401	22820	24426	17665
citrulline-CBZ	12684	12767	8052	10069	11535	16881	21918
coenzyme A-nega	3797	3610	4634	6644	8363	7564	8189
CTP-nega	15416	13636	29660	22109	26711	34965	39206
dATP-nega	3911	4175	2978	4692	7853	8615	9752
dCTP-nega	3324	3325	6315	3339	3779	2822	3526
D-erythrose-4-phosphate	381	375	224	764	595	363	448
D-glucono-δ-lactone-6-phosphate	483	397	667	574	689	341	554
D-glyceraldehyde-3-phosphate	364	270	748	330	384	277	392
dihydroxy-acetone phosphate	3878	4254	4138	4783	5208	4105	4902
D-sedoheptulose-7-phosphate	3178	2416	1805	1396	1063	1279	1149
dTTP-nega	7881	7042	2934	697	126	100	100
dUMP-nega	100	131	5238	4449	5352	6481	3448
fructose-1,6-bisphosphate	32267	29318	28499	17579	9903	11744	7723
glucose-6-phosphate	2393	2154	1590	2153	1809	1461	1200
glutamate-CBZ	6346796	5993494	8529302	9080733	9465807	10327039	10445683
glutamine-CBZ	278753	249311	549144	496872	544061	570269	513749
glutathione disulfide-nega	29714	29485	26434	19127	17670	13593	9490
glycine-CBZ	10090	6225	2748	1868	1412	3207	102132
GTP-nega	28766	28056	19103	24599	28799	30770	29133
hexose-phosphate	9248	8366	6662	7333	6851	6912	5089
histidine-CBZ	9832	8777	15614	6336	6763	7911	5226
homocysteine-MMTS	1656	1507	4480	21061	25249	26160	17117
hypoxanthine	24330	15949	27367	31325	38058	43315	46259
inosine	259139	361722	381532	348861	323261	276336	265844
leucine-isoleucine-CBZ	33174	28717	86579	154785	153405	143956	977102
lysine-CBZ	116409	106235	412797	953254	1118993	1336912	1877532
malate	44861	29325	30019	22258	20773	21861	25998
methionine-CBZ	16483	15302	9648	1994	1658	1807	508
methylnicotinamide	9711	10363	8789	12030	14046	11408	10597
NAD+_nega	24148	24807	30412	34254	42790	43239	62537
NADP+_nega	8771	11976	11913	12236	12472	14760	15737

NADPH_nega	4013	2220	2210	4091	4252	2919	4705
N-Carbamoyl-L-aspartate	27907	29509	2095	2796	4700	7443	5592
ornithine-CBZ	15896	12162	10026	12880	12201	19617	23454
pantothenate	100	100	100	582	1342	222	100
phenylalanine-CBZ	534	863	3822	6111	4533	2916	1646
phenylpyruvate	1745	775	1568	3108	3253	4513	5833
phosphoenolpyruvate	601	691	1158	1603	2270	1153	2698
prephenate	341	253	2023	2448	3841	2842	2793
proline-CBZ	50271	41262	22406	21972	30930	59640	124252
Pyrophosphate	3278	2190	2079	2351	2482	1844	1482
pyruvate	793	830	488	583	679	578	614
ribose-phosphate	3813	8441	5120	3765	2750	3272	3690
S-adenosyl-L-methionine	167	100	303	100	100	100	100
Sedoheptulose bisphosphate	845	1128	1327	462	944	592	323
serine-CBZ	21542	17008	11299	7452	7856	11382	10480
sn-glycerol-3-phosphate	1602	1643	1641	968	1488	1156	2074
succinate	51414	40632	39745	133893	39108	42258	47353
threonine-CBZ	42766	36897	90231	122206	119199	132635	313803
tryptophan-CBZ	2928	2867	10896	12843	11319	9228	7731
tyrosine-CBZ	3394	4583	26153	60227	52952	30013	29099
UDP-D-glucose	122835	128202	108152	95787	112844	159694	194670
UDP-D-glucuronate	46953	50067	66845	61068	58913	65217	62895
UDP-N-acetyl-glucosamine	25278	29320	27316	27189	26289	33729	36159
uracil	100	100	100	350	646	952	1812
UTP-nega	33255	27180	47798	42966	46072	57604	66207
valine-CBZ	65503	61337	558734	1334978	1324684	1193630	152501
xanthosine	1289	997	993	1363	879	978	1318

Trimethoprim (4 µg/ml) + 0.3 mM glycine replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.576	0.576	0.597	0.618	0.660	0.744	0.913
1,3-diphosphateglycerate	740	616	1070	1867	6030	7602	7518
2,3-dihydroxybenzoate	7326	3132	185247	947196	1632843	1938315	2604963
2,3-Diphosphoglyceric acid	6194	5307	7562	11810	34864	43599	44230
2-Isopropylmalic acid	190536	135996	118486	43487	46833	43630	64247
3-phosphoglycerate	19289	17386	20236	14282	23090	23710	33921
5-phosphoribosyl 1-pyrophosphate	31848	31430	100430	89344	136540	147167	109727
6-phospho-D-gluconate	20203	12934	8877	3081	3689	4849	5035
acetyl-CoA-nega	42217	38569	33981	21565	17742	11550	17517
acetylphosphate	8.246751	10.31229	11.32122	13.52631	13.21736	19.49469	15.14108
aconitate	20316	11632	18790	31767	44652	41122	39356
ADP-D-glucose	246	411	121	100	100	100	310
ADP-nega	3660	4031	2864	660	941	1127	1421
a-ketoglutarate	15359	15733	9325	6337	5579	9320	8968
alanine-CBZ	200002	204525	296340	782379	848145	1090970	1210504
AICAR	100	100	942	1988	1248	2398	1401
anthranilate	139	100	207	100	639	956	1489
arginine-CBZ	2001	4040	12833	14153	9166	13523	14813
asparagine-CBZ	36732	54529	120789	135339	147357	196212	284603
aspartate-CBZ	207660	317827	945525	1144521	1280319	1371729	1500407
ATP-nega	188531	139019	83420	24812	24587	28503	42361
Cholesteryl sulfate	1042	650	824	1179	766	975	980
citrate	45130	45938	66730	70005	85395	70112	69503
citrate/isocitrate	445100	431607	599249	622738	774720	665767	613801
citrulline-CBZ	29564	33728	28756	28518	25885	29137	35154
coenzyme A-nega	1918	2613	5851	2743	3556	2780	2360
CTP-nega	54743	38926	38147	18326	20604	22356	21661
dATP-nega	13814	14017	11916	3894	6060	6088	6470
dCTP-nega	11790	10427	12626	5724	3849	5719	3781
dGDP	4928	3462	3018	817	1426	529	1048
D-glucono-δ-lactone-6-phosphate	6046	6408	6174	5515	5452	5295	6402
D-glyceraldehyde-3-phosphate	834	452	401	1013	2371	1554	2185
dihydroorotate	3288	2765	396	310	100	180	343
dihydroxy-acetone phosphate	1049	775	560	1129	2645	2152	1683
D-sedoheptulose-7-phosphate	3197	2528	4650	2750	3983	3718	4820
dTTP-nega	27989	23694	17372	3579	2821	1977	2249
dUMP-nega	100	197	4430	1109	658	1020	1948
dUTP-nega	965	992	1774	238	421	345	598
fructose-1,6-bisphosphate	53197	76623	118942	253476	409316	308388	286277
fructose-6-phosphate	2738	1651	3012	2354	3825	4317	3932
geranyl-PP	29436	38201	26501	27370	28559	26089	27263
glucose-1-phosphate	100	227	243	407	198	175	107
glucose-6-phosphate	6874	5523	6641	6578	6367	7415	7539
glutamate-CBZ	7739965	9649982	10675835	9560307	8661368	9088527	10263451
glutamine-CBZ	351285	449146	735581	610236	543731	634277	904746
glutathione disulfide-nega	42804	34294	48164	40300	45107	44074	32132
glutathione-nega	93767	88039	86645	63058	51846	47571	42914
glycine-CBZ	484367	652501	576375	618922	601173	591427	512660
GTP-nega	115310	68306	42131	43550	49726	48059	47470

hexose-phosphate	18193	11830	21304	17412	27572	27298	26744
histidine-CBZ	278055	301763	323547	299458	266920	290812	320458
homocysteine-MMTS	7298	6634	33445	47055	37230	49929	37929
hydroxyphenylpyruvate	135	100	128	126	949	848	2049
Indoleacrylic acid	3311	3128	2965	2880	2644	2588	3440
isocitrate	108	119	234	674	1831	2809	1699
Kynurenic acid	8923	7710	1928	7886	4952	2773	5579
leucine/isoleucine-CBZ	52831	55927	96305	179877	209157	261129	647692
lysine-CBZ	157615	227523	561331	899734	818111	1509360	2683272
malate	248039.1	207338.8	393693.3	197715	251559.4	249176.1	267781.6
methionine-CBZ	54082	59771	25590	61594	77427	36739	35356
Methylmalonic acid	47790	33861	79351	37824	39065	25564	31490
NAD+_nega	37656	35844	46647	54292	66621	70545	91358
NADH_nega	1406	1153	929	1131	2335	284	388
NADP+_nega	32066	31586	37560	21445	21520	16366	25073
NADPH_nega	5852	7367	7225	3625	2084	3047	2391
ornithine-CBZ	16728	25513	60985	52037	43373	52281	88220
orotate	59907	22070	6367	5232	4006	2985	2698
p-aminobenzoate	706	1111	480	725	383	338	237
pantothenate	101	240	677	4086	4070	5971	3653
phenylalanine-CBZ	702	612	4109	10959	13642	16980	22449
phenylpyruvate	1884	997	2401	5857	7334	9952	26195
phosphoenolpyruvate	1458	2206	4982	6731	10251	15779	22393
p-hydroxybenzoate	1627	871	1062	959	2207	2780	2907
prephenate	1526	459	4109	14802	24224	24201	29197
proline-CBZ	86411	80121	63173	34260	36112	39993	43388
Pyrophosphate	1993	1472	2079	1387	1868	1493	1489
pyruvate	1075	571	1658	992	2323	6785	9774
ribose-phosphate	2143	2174	6508	2940	3866	4914	4457
S-adenosyl-L-methionine	2820	3030	346	1036	2829	936	1744
serine-CBZ	60112	50062	23949	15146	14513	16896	23679
S-ribosyl-L-homocysteine-nega	449	252	148	224	210	105	336
succinate C12	1469	869	2251	1474	1169	685	996
threonine-CBZ	80088	95732	141571	150916	145482	178199	221604
trehalose	142	165	113	207	100	207	621
trptophan-CBZ	5155	6060	15700	27430	28578	20900	19249
tyrosine-CBZ	7220	7734	54859	208603	289576	291881	331399
UDP-D-glucose	271784	222551	152276	213255	208825	205500	181498
UDP-D-glucuronate	73234	82032	106229	77128	54220	50431	88179
UDP-N-acetyl-glucosamine	324	100	100	100	100	100	100
UTP-nega	98251	82646	93494	52717	50021	63938	79062
valine-CBZ	159247	159616	521232	3670325	4383810	5167267	3882147

Trimethoprim (4 µg/ml) + 0.3 mM glycine replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.576	0.576	0.597	0.618	0.660	0.744	0.913
1,3-diphosphateglycerate	1171	2057	2445	2699	7205	12325	10921
2,3-dihydroxybenzoate	10380	5139	204338	1142477	1492673	2022238	2293929
2,3-Diphosphoglyceric acid	11141	8785	12842	16355	38070	57638	58036
2-Isopropylmalic acid	223832	148778	131395	45834	41127	54400	51066
3-phosphoglycerate	18489	18161	26044	18220	20227	38523	30666
5-phosphoribosyl 1-pyrophosphate	38038	38806	170994	125838	139596	171465	130904
6-phospho-D-gluconate	20217	10986	12932	3050	3969	6621	4328
acetyl-CoA-nega	29221	24760	24248	23065	10651	13821	12710
acetylphosphate	26.28166	8.539456	10.51213	20.88009	57.22926	22.54585	81.59029
aconitate	27509	14910	20303	31241	44029	51496	43749
ADP-D-glucose	1699	628	100	100	100	100	100
ADP-nega	5668	3983	3901	1490	1608	1127	1044
a-ketoglutarate	13845	9624	10097	8059	6098	11620	8549
alanine-CBZ	242153	229908	311575	916024	931666	1067020	1044870
AICAR	100	100	853	1546	4004	30	1560
anthranilate	110	134	100	100	850	3341	6176
arginine-CBZ	3730	4544	13065	15442	10153	14708	15791
asparagine-CBZ	49033	50261	105493	148566	158577	184906	196254
aspartate-CBZ	226295	272984	897647	1233879	1288901	1462878	1421315
ATP-nega	217310	178353	105381	36128	23427	41920	47495
Cholesteryl sulfate	827	1879	1228	1335	1618	1706	2004
citrate	69081	62611	76703	73379	91724	89331	72621
citrate/isocitrate	570756	597966	689482	722484	855506	777780	631707
citrulline-CBZ	32369	33715	37606	31888	29846	33127	24281
coenzyme A-nega	2371	3854	6378	6836	4266	5301	3668
CTP-nega	69503	47917	60068	29848	25076	30513	26322
dATP-nega	17307	14833	11156	8865	4746	10159	6538
dCTP-nega	13183	12720	15168	6826	4627	5323	6437
dGDP	4268	4078	4322	1836	2079	1108	1000
D-glucono-δ-lactone-6-phosphate	4639	4904	5306	4632	5762	5155	5864
D-glyceraldehyde-3-phosphate	194	309	1101	2028	3181	2859	1280
dihydroorotate	2342	2858	199	100	100	152	157
dihydroxy-acetone phosphate	316	380	883	1529	2972	2858	1016
D-sedoheptulose-7-phosphate	4089	2602	3239	3797	4150	6344	4796
dTTP-nega	44115	36178	19793	6721	2281	2059	2282
dUMP-nega	100	272	5109	2114	554	1331	1988
dUTP-nega	1439	1553	1035	690	532	768	440
fructose-1,6-bisphosphate	74851	111060	149448	296177	401505	337924	305545
fructose-6-phosphate	2275	1863	3297	3578	3700	5420	2594
geranyl-PP	25073	27387	26407	25847	24701	26644	26382
glucose-1-phosphate	222	100	207	247	100	438	100
glucose-6-phosphate	4718	3714	6700	6479	8071	10096	7146
glutamate-CBZ	8819144	9342889	10512835	9672436	8601268	9086716	8816768
glutamine-CBZ	446988	416157	630800	692523	542736	681653	677412
glutathione disulfide-nega	74313	75586	80221	66668	46381	64491	36143
glutathione-nega	28597	27931	33803	28431	19997	22126	18946
glycine-CBZ	526263	700350	626237	597804	624313	569536	527474
GTP-nega	127707	76221	65927	65516	58090	67401	52750

hexose-phosphate	17073	13460	22828	24318	31396	35787	27765
histidine-CBZ	308942	303313	276099	264457	274493	257614	308407
homocysteine-MMTS	7918	7361	29316	49195	27490	51529	32879
hydroxyphenylpyruvate	143	100	100	323	426	1080	1129
Indoleacrylic acid	3931	2881	2652	3810	2509	3147	4232
isocitrate	100	100	100	674	4067	2710	2403
Kynurenic acid	2036	3300	3346	2674	5649	5050	4348
leucine/isoleucine-CBZ	64694	60988	95847	203209	217330	280130	637408
lysine-CBZ	209030	252090	446340	1132772	844498	1920658	2415078
malate	171612.8	182464	436839.1	207425.9	250850.5	275266.2	218250
methionine-CBZ	57657	57722	29450	63869	73913	28894	30513
Methylmalonic acid	66607	50153	98516	49716	38632	51501	31578
NAD+_nega	45506	46243	56359	65252	69604	96688	94809
NADH_nega	249	1869	3366	1460	4550	1782	243
NADP+_nega	43353	31758	47700	47617	23240	37185	32953
NADPH_nega	8507	9336	8399	4629	2695	3205	2824
ornithine-CBZ	26997	27067	55297	49848	64373	57353	59983
orotate	42785	24148	11080	3664	3358	2113	2283
p-aminobenzoate	431	422	221	325	344	750	260
pantothenate	100	557	1202	4331	3786	6191	4707
phenylalanine-CBZ	647	934	4595	14889	15053	21235	18937
phenylpyruvate	1031	1017	2830	8115	7946	15166	17719
phosphoenolpyruvate	1982	2823	4393	6084	10906	21072	19341
p-hydroxybenzoate	1580	826	1455	1889	1827	2617	3777
prephenate	1214	895	4337	16101	24966	27832	30656
proline-CBZ	82075	83100	77670	39351	36071	37946	42298
Pyrophosphate	2633	2423	3647	2322	1680	2690	1565
pyruvate	1358	1405	1562	1930	2419	9242	11103
ribose-phosphate	3038	2292	6315	3728	3851	6541	4879
S-adenosyl-L-methionine	3691	2817	1463	2287	2610	1147	2118
serine-CBZ	56467	52378	22902	16132	19636	15667	22067
S-ribosyl-L-homocysteine-nega	354	372	225	486	100	122	100
succinate C12	2563	1425	4166	1293	887	1523	789
threonine-CBZ	108863	89514	138144	181296	152165	213384	210368
trehalose	129	100	137	243	254	114	322
trptophan-CBZ	4785	5272	17130	32190	29427	26401	17770
tyrosine-CBZ	6566	8292	59874	257224	293375	391981	319490
UDP-D-glucose	125168	151038	175787	164805	219312	249689	193692
UDP-D-glucuronate	82267	87539	120138	74631	66705	100766	61279
UDP-N-acetyl-glucosamine	100	100	100	100	100	100	100
UTP-nega	128055	106056	121984	71644	49188	84997	89987
valine-CBZ	182577	174860	519589	4193021	4476842	4756978	4420642

Trimethoprim (4 µg/ml) + 0.3 mM glycine replicate 3 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.520	0.524	0.483	0.402	0.420	0.462	0.510
1,3-diphosphateglycerate	214	519	801	1791	3479	3616	5732
2,3-dihydroxybenzoate	2835	1713	47942	153544	175289	141147	246245
2,3-Diphosphoglyceric acid	4099	4117	5020	10242	16450	14648	18005
2-Hydroxy-2-methylbutanedioic acid	22987	7397	1945	2170	373	1329	1074
2-Isopropylmalic acid	42888	27634	11940	12264	10991	4896	10152
3-phosphoglycerate	13578	15356	11982	9868	15095	8710	15141
5-phosphoribosyl 1-pyrophosphate	22646	41154	87374	68522	93601	81660	84881
6-phospho-D-gluconate	19397	12278	8667	2189	3156	1015	2760
acetyl-CoA-nega	39181	41070	30062	24199	14483	9434	18400
acetylphosphate	14789	13023	15146	19142	24583	14781	33763
aconitate	7566	4000	4695	16528	21342	14637	12531
adenosine 5'-phosphosulfate	1730	1362	922	753	453	230	458
ADP-nega	3442	2890	1223	893	728	670	2074
a-ketoglutarate	14243	10313	8207	6882	6730	18843	5714
alanine-CBZ	338504	336423	753613	1640487	1610082	1466894	1807573
anthranilate	130	100	189	176	270	260	1138
arginine-CBZ	13782	17102	33677	26279	30180	22580	56744
asparagine-CBZ	39142	47241	81245	114484	118909	91905	135964
aspartate-CBZ	182722	303014	812867	915810	1001989	697868	878591
ATP-nega	66235	57587	15480	7962	8785	6399	15102
citrate	9961	5842	4550	39433	49047	12493	12200
citrate-isocitrate	62760	36130	34766	211905	235368	60301	68693
citrulline-CBZ	39879	42754	30923	44633	34490	14150	25354
coenzyme A-nega	7978	12466	14521	14435	10876	6933	9479
CTP-nega	20582	18362	12132	4863	7984	7161	13369
dATP-nega	6185	7483	1030	876	1644	676	3904
dCTP-nega	5290	5372	4965	2467	2477	1264	2834
D-erythrose-4-phosphate	535	742	624	563	544	705	399
D-glyceraldehyde-3-phosphate	1016	1029	2059	2676	2140	1917	2265
dihydroxy-acetone phosphate	13097	15202	18821	48508	44022	28108	30222
D-sedoheptulose-7-phosphate	3163	1952	3122	3001	3746	1823	1857
dTTP-nega	12097	11317	3236	1452	594	559	100
dUMP-nega	100	868	3325	347	449	363	1560
fructose-1,6-bisphosphate	82819	122180	178163	613566	573140	365223	278158
fructose-6-phosphate	7105	4024	6320	6585	8441	3608	5012
glucono-δ-lactone	206	906	828	933	1381	1182	1104
glutamate-CBZ	8540789	9519781	8208207	8775737	8402980	6338901	9823269
glutamine-CBZ	467855	554496	619654	606862	585542	404698	719236
glutathione disulfide-nega	26712	40623	31077	29315	26593	17584	14723
glutathione-nega	96056	90196	70573	73805	49819	38839	46864
glycine-CBZ	812195	831301	873071	872543	838984	921831	767083
GTP-nega	40035	31720	18834	24833	27725	19830	22978
hexose-phosphate	15575	13358	20837	21460	23717	14750	15300
histidine-CBZ	17435	14046	5407	100	100	5159	7147
homocysteine-MMTS	1756	1140	4723	2819	3130	2673	8518
isocitrate	508	100	650	3916	5651	1857	1426
leucine-isoleucine-CBZ	112740	145272	178780	411074	394106	349466	1532417
lysine-CBZ	303054	388454	532433	743257	1020573	901886	4060650

malate	76889	73642	96838	32541	47196	20746	27957
Maleic acid	4716	4257	3505	3058	3100	4373	3136
methionine-CBZ	39201	35244	29978	76609	54056	31023	8514
NAD+_nega	51677	55986	52457	67938	68224	46381	70811
NAD+_posi	483	649	724	1213	926	565	1752
NADP+_nega	41439	38159	33193	41496	32685	23291	34869
NADPH_nega	11252	9753	10633	6959	5405	4077	7557
N-Carbamoyl-L-aspartate	53341	22526	772	520	230	3456	233
Octulose bisposphate	1407	945	908	1810	1147	740	931
ornithine-CBZ	42131	55240	111015	93895	55077	22503	30327
pantothenate	100	100	347	2828	3709	1363	903
phenylalanine-CBZ	3101	5061	12678	28078	28164	23560	32791
phenylpyruvate	2202	1132	1266	5368	9332	8408	17173
phosphoenolpyruvate	6017	7827	14474	11364	19425	11974	24910
prephenate	1547	518	1884	7615	8032	5800	9455
proline-CBZ	130402	108624	63434	47821	46781	26596	66878
Pyrophosphate	17394	9141	16437	14424	11726	15983	14229
pyruvate	744	1016	3556	1842	3509	3355	12185
ribose-phosphate	4089	3316	7402	5343	4800	2757	4527
S-adenosyl-L-methionine	3604	1951	1254	1054	3390	4061	2228
Sedoheptulose bisphosphate	1553	2232	11134	42465	52360	32564	21209
serine-CBZ	57617	35926	14291	8929	6718	7448	11811
shikimate-3-phosphate	269	829	863	417	463	328	395
sn-glycerol-3-phosphate	3840	3379	2671	3593	3602	6045	2371
succinate	55080	36476	45545	31572	30075	41526	23601
threonine-CBZ	87831	92302	100346	128606	131025	95597	184718
trehalose	159	100	460	196	416	512	890
trehalose 6-Phosphate	100	100	100	111	679	488	567
tryptophan-CBZ	9969	8445	18137	47471	29406	12687	16493
tyrosine-CBZ	14228	21837	61480	251057	246892	102097	261041
UDP-D-glucose	318567	351497	361004	384796	374607	286722	312026
UDP-D-glucuronate	92886	97521	86883	75198	71659	41446	61265
UDP-N-acetyl-glucosamine	59194	75677	26179	30579	37168	21243	33643
UDP-nega	2549	1395	1036	814	1206	290	845
uracil	100	100	100	278	108	553	194
UTP-nega	45761	45458	32765	26955	29515	27798	44807
valine-CBZ	224944	262987	1550313	6313571	6829962	6373527	6662768

Trimethoprim (4 µg/ml) + 0.3 mM glycine replicate 4 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.520	0.524	0.483	0.402	0.420	0.462	0.510
1,3-diphosphateglycerate	512	348	1020	2041	4026	6845	3691
2,3-dihydroxybenzoate	3917	2001	56796	118771	149492	188963	236903
2,3-Diphosphoglyceric acid	3263	2628	4615	7278	13095	19169	14041
2-Hydroxy-2-methylbutanedioic acid	21573	3601	2905	2537	1482	608	1038
2-Isopropylmalic acid	37657	14900	11077	10555	9771	9022	8979
3-phosphoglycerate	10903	8266	13041	7755	12109	11673	15765
5-phosphoribosyl 1-pyrophosphate	22761	47106	107049	99111	144980	162539	115862
6-phospho-D-gluconate	16598	9431	8592	1791	3445	3047	3186
acetyl-CoA-nega	22656	18033	21772	13558	10096	11176	11972
acetylphosphate	13783	7628	12866	15271	17574	24556	24547
aconitate	5443	3482	6752	14780	19709	20576	16307
adenosine 5'-phosphosulfate	689	900	1008	1251	139	101	814
ADP-nega	3098	2435	1769	1527	2277	1735	1053
a-ketoglutarate	11641	7153	7383	6111	7730	5240	13629
alanine-CBZ	392916	297202	834126	1602766	1535583	1697447	1600091
anthranilate	100	100	100	100	272	1158	2063
arginine-CBZ	10360	13039	29680	26999	22954	27997	39859
asparagine-CBZ	38104	40684	84374	103597	107557	114733	118032
aspartate-CBZ	191521	294531	758096	807273	862445	932453	782779
ATP-nega	59773	45826	14031	9472	10167	11418	17927
citrate	10673	3426	7087	23435	39224	26662	10261
citrate-isocitrate	46739	14467	31965	143939	184989	120182	48007
citrulline-CBZ	41675	35270	34579	35463	28674	24455	20527
coenzyme A-nega	8365	7578	10083	11334	10010	8509	7006
CTP-nega	21232	18851	12902	6051	7967	11364	7375
dATP-nega	5801	4854	2496	2076	871	1309	1661
dCTP-nega	6614	5914	6563	1419	2703	2452	2595
D-erythrose-4-phosphate	555	1080	785	1082	360	379	560
D-glyceraldehyde-3-phosphate	589	1323	816	3032	2541	2769	1117
dihydroxy-acetone phosphate	10908	9902	18291	38836	41583	37441	25652
D-sedoheptulose-7-phosphate	1859	1130	3218	1828	2660	1978	2678
dTTP-nega	13026	9925	3548	844	488	123	100
dUMP-nega	100	226	2474	558	379	569	1255
fructose-1,6-bisphosphate	81833	88114	198891	519906	502022	440293	234872
fructose-6-phosphate	4141	2472	6471	5722	5193	4970	5172
glucono- δ -lactone	558	508	426	527	610	1328	701
glutamate-CBZ	9496354	9045904	8897737	8589127	8091353	8477715	9310297
glutamine-CBZ	562711	435919	656689	531635	462186	596109	606663
glutathione disulfide-nega	43807	56015	46638	34204	32069	42171	34301
glutathione-nega	80368	44966	67405	53318	37339	49883	25843
glycine-CBZ	714584	855745	794769	801450	821547	801210	727331
GTP-nega	47023	30931	18004	21842	30773	26082	15071
hexose-phosphate	11110	7898	21225	14246	20261	15907	16031
histidine-CBZ	15653	10331	6173	3644	4637	8058	11408
homocysteine-MMTS	1531	1497	4536	3945	1366	3564	7326
isocitrate	213	125	559	2332	3475	3367	1019
leucine-isoleucine-CBZ	136989	110923	230306	380262	359758	526754	1488167
lysine-CBZ	211506	206289	312063	501166	577738	1060647	2430718

malate	68805	44382	89372	33474	33017	24339	21890
Maleic acid	3875	2882	2848	3083	2894	2682	3346
methionine-CBZ	40775	30978	31076	67359	51845	29945	12322
NAD+_nega	41915	37008	49182	48339	51962	61200	62204
NAD+_posi	678	922	1999	459	1377	1230	1664
NADP+_nega	36918	28174	30222	23047	19942	18162	16701
NADPH_nega	6528	5437	8609	6493	3125	4634	4618
N-Carbamoyl-L-aspartate	44597	14754	383	261	334	473	1480
Octulose bisposphate	1009	432	564	881	1630	912	567
ornithine-CBZ	28027	32028	84176	57158	32702	31949	15603
pantothenate	100	213	339	3739	1944	3257	1583
phenylalanine-CBZ	3928	4757	14866	28008	25310	37141	32534
phenylpyruvate	4365	829	1975	3468	6534	8499	18153
phosphoenolpyruvate	5197	5104	13406	11062	17134	17716	21879
prephenate	1207	342	3204	4483	6564	7548	6633
proline-CBZ	113803	83751	62686	38613	36685	40051	51246
Pyrophosphate	11289	11847	11022	15101	20747	22711	12099
pyruvate	965	458	2317	1020	2459	4356	7434
ribose-phosphate	2594	2872	8086	3294	3400	3162	3718
S-adenosyl-L-methionine	2668	1487	452	1680	2099		2689
Sedoheptulose bisphosphate	1038	1485	11535	35029	42927	37522	18276
serine-CBZ	59919	23789	11386	7219	6938	8041	10612
shikimate-3-phosphate	1871	598	1440	959	1123	1447	1050
sn-glycerol-3-phosphate	2872	1769	1494	3544	3134	2963	2980
succinate	40609	27984	41475	29764	31479	21609	33646
threonine-CBZ	81374	68788	94434	106712	105258	128202	144583
trehalose	143	523	188	141	182	536	645
trehalose 6-Phosphate	100	100	100	100	250	883	318
tryptophan-CBZ	8259	9758	21635	46403	25754	17751	14099
tyrosine-CBZ	12858	21215	81415	244594	243122	323769	198802
UDP-D-glucose	251183	232299	307767	275594	281365	340621	246640
UDP-D-glucuronate	67566	63986	73525	57191	48539	48895	41748
UDP-N-acetyl-glucosamine	56140	44706	32315	26331	29427	26782	26571
UDP-nega	1145	321	551	415	903	957	580
uracil	100	100	100	110	128	124	1005
UTP-nega	47179	42012	43109	32896	32046	43519	44682
valine-CBZ	289643	253836	1772405	6365267	6593737	7683821	6454803

Trimethoprim (4 µg/ml) + 0.3 mM gly + met replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.632	0.632	0.649	0.667	0.701	0.771	0.910
1,3-diphosphateglycerate	305	267	280	815	2131	4088	3486
2,3-dihydroxybenzoate	635	390	51860	153860	230365	341412	425540
2,3-Diphosphoglyceric acid	3439	3334	2851	5806	11512	17480	21812
2-Hydroxy-2-methylbutanedioic acid	41179	17656	8461	8467	5016	4433	2762
2-Isopropylmalic acid	148557	107259	59799	22771	25134	20631	23300
2-oxo-4-methylthiobutanoate	3791	1728	2204	291	228	313	247
3-phosphoglycerate	26396	23432	29781	25568	35680	32193	35854
5-phosphoribosyl 1-pyrophosphate	8794	15661	28398	25191	35040	32745	26089
6-phospho-D-gluconate	11969	8503	8159	2927	6378	3161	3409
acetyl-CoA-nega	7685	7342	6333	5333	3572	4190	2215
acetylphosphate	10857	6556	7411	9732	15186	18475	23607
aconitate	9513	7155	7164	16050	20682	16458	17799
ADP-nega	2447	3532	2183	917	937	452	158
a-ketoglutarate	16264	8111	5065	4160	5807	5192	6840
alanine-CBZ	230875	228083	433962	996202	1101690	1260683	1415615
alanine-CBZ-C13N15-IS	532133	508863	420811	300160	290766	263901	238465
AICAR	100	100	2938	4568	4699	4738	3553
anthranilate	113	100	322	100	2257	2781	12194
arginine-CBZ	6740	7477	13028	13267	11674	10021	8765
Ascorbic acid	176	100	5700	2396	10792	17064	29019
asparagine-CBZ	114064	99466	185514	206536	192001	227795	214485
aspartate-CBZ	303491	360786	905972	1062566	1101089	1201181	1043197
ATP-nega	70960	57427	21604	7626	8255	8116	5658
citrate	17464	18245	16651	21503	24483	15659	16515
citrate/isocitrate	141258	150260	135493	199784	212828	130537	118537
citrulline-CBZ	23337	21478	31683	28966	17241	20968	18824
coenzyme A-nega	746	986	1193	602	1010	968	258
CTP/UTP-nega-IS	19522	19576	22776	23119	20669	23022	24996
CTP-nega	18706	17618	11700	4369	4386	3902	4145
dATP-nega	4711	4665	2451	2345	833	876	546
dCTP-nega	3918	5038	3003	1256	1521	1956	1202
dGDP	3268	3933	1875	340	579	507	639
D-glucono-δ-lactone-6-phosphate	2526	2579	2231	2218	2580	2127	2202
D-glyceraldehyde-3-phosphate	374	1108	1791	3400	4249	4342	3826
dihydroorotate	5238	5311	589	216	100	138	100
dihydroxy-acetone phosphate	13342	12788	21467	52473	54801	51907	54605
D-sedoheptulose-7-phosphate	6177	4247	7914	5945	7170	6463	7364
dTTP-nega	10196	10797	3381	2369	694	291	127
dUMP-nega	100	891	11927	2647	1923	807	1792
fructose-1,6-bisphosphate	10673	12803	21750	68521	74847	73278	81739
fructose-6-phosphate	1276	1091	3111	2691	3960	2889	2998
fumarate C12	1601	1085	2259	1398	1479	368	908
geranyl-PP	12869	11881	12067	12444	12544	11712	12313
glucose-1-phosphate	1578	1665	3586	2787	4806	2661	3803
glucose-6-phosphate	3919	3123	6415	6168	5355	5161	5505
glutamate-CBZ	7807651	7526140	8368858	8550093	7344356	7702869	6814338
glutamate-CBZ-C13N15-IS	193130	144076	132989	119921	112153	125613	123482
glutamine-CBZ	532753	462694	716399	620425	530363	544200	485983
glutathione disulfide-nega	28344	29838	30464	28137	25776	30130	51319
glutathione-nega	216407	218401	210924	186757	141570	112744	11447
glycine-CBZ	455566	554959	432275	449131	452078	392027	377830

GTP-nega	1388	1656	100	447	249	268	135
hexose-phosphate	10643	9241	18521	20406	26624	22138	23427
histidine-CBZ	15357	12095	8391	3958	3588	3933	5598
homocysteine-MMTS	43442	41691	33258	36086	18365	22329	12016
Indoleacrylic acid	1646	1409	2010	1645	1116	1734	1980
leucine/isoleucine-CBZ	52519	48493	81019	144201	152455	156827	164044
lysine-CBZ	188418	175172	404235	713092	521881	796806	897858
malate	60668	38404	57467	25877	33033	24224	22346
methionine-CBZ	5726679	5566031	5925366	5448499	5187795	5387981	5268748
Methylmalonic acid	46941	28848	43044	29255	24909	16040	16576
N-Acetyl-L-alanine	100	100	100	170	174	608	1251
NAD+_nega	27512	27520	29446	40016	42093	44125	48893
NADP+_nega	12507	12835	10942	14452	8140	8543	5396
NADPH_nega	2511	3086	2543	1610	1185	208	889
N-Carbamoyl-L-aspartate	30661	24753	714	221	100	137	100
ornithine-CBZ	17539	12778	48031	50402	24408	36109	29123
orotate	26498	13696	4146	1947	1669	1352	667
pantothenate	100	100	100	1778	4007	3446	3539
phenylalanine-CBZ	496	594	7820	16184	18545	23061	26025
phenylpyruvate	2815	577	6505	11656	15233	13378	14924
phosphoenolpyruvate	2132	2206	4057	6432	15025	12945	14322
p-hydroxybenzoate	1498	697	783	1116	1342	1312	2345
prephenate	1323	302	5643	14097	16577	18596	24909
proline-CBZ	77333	74998	43783	22579	23875	19651	18609
pyruvate	1038	607	5192	2845	4589	6217	7259
quinolinate	15346	12761	12857	11899	13443	10108	14038
ribose-phosphate	10839	10221	19918	14981	18786	15025	16341
S-adenosyl-L-methionine MMTS	6728	4231	3749	3326	4006	3975	7682
S-adenosyl-L-methionine pos	10607	5076	6353	6018	4358	5071	6840
serine-CBZ	65574	44237	15529	9278	8464	8833	7434
shikimate-3-phosphate	420	690	586	542	1795	870	1653
sn-glycerol-3-phosphate	4550	3446	2914	4850	6237	4177	4519
S-ribosyl-L-homocysteine-nega	493	714	650	1079	124	136	100
succinate C12	1179	841	1407	759	447	356	345
threonine-CBZ	78930	62756	85584	78692	72054	68447	66269
threonine-CBZ-C13	8237	6520	6208	4104	4758	3856	3481
trehalose	104	102	100	100	371	297	1097
trehalose 6-Phosphate	100	100	100	182	338	1007	1558
trptophan-CBZ	5061	5211	21724	31028	21503	25905	19613
tyrosine-CBZ	5920	7083	87994	277940	387497	369229	383346
UDP-D-glucose	324476	304636	336855	361762	400098	450568	475036
UDP-D-glucuronate	104518	95112	85928	68925	59770	50794	56687
UDP-N-acetyl-glucosamine	75178	75355	41099	33841	35867	32362	30150
UDP-nega	1093	1721	1333	695	808	451	549
UTP-nega	30970	30150	25955	17761	15360	16716	17756
valine-CBZ	85482	63085	344942	2242961	2144860	2332312	2382079

Trimethoprim (4 µg/ml) + 0.3 mM gly + met replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.632	0.632	0.649	0.667	0.701	0.771	0.910
1,3-diphosphateglycerate	470	621	1460	2404	4316	6108	6106
2,3-dihydroxybenzoate	1101	745	54118	172861	232250	322038	440604
2,3-Diphosphoglyceric acid	5933	5447	9188	10449	19979	32607	29440
2-Hydroxy-2-methylbutanedioic acid	42109	21035	9179	4703	4441	3890	2253
2-Isopropylmalic acid	135429	109116	52547	18825	25588	26903	22303
2-oxo-4-methylthiobutanoate	4070	3465	2479	848	458	374	785
3-phosphoglycerate	20713	29519	31042	20544	34394	32986	32550
5-phosphoribosyl 1-pyrophosphate	13837	25337	64975	38204	65302	59317	37000
6-phospho-D-gluconate	14356	9531	11594	4373	6959	5084	3530
acetyl-CoA-nega	4901	4727	3858	3545	4332	2949	2049
acetylphosphate	5170	3221	4873	5285	6808	9621	14112
aconitate	7326	5768	7717	15337	18732	19728	16643
ADP-nega	2760	3499	1729	419	615	469	178
a-ketoglutarate	19360	9734	12470	7764	8025	8064	7440
alanine-CBZ	222589	185947	469347	1035449	1068665	1206329	1294956
alanine-CBZ-C13N15-IS	569515	388932	338871	289433	274718	249478	246517
AICAR	100	138	2446	1882	2051	2229	1217
anthranilate	100	100	164	100	10649	16235	23894
arginine-CBZ	4722	7672	12371	8981	10648	10117	6702
Ascorbic acid	584	234	8523	1802	11572	16352	37893
asparagine-CBZ	85281	103522	142686	180647	198231	201978	165030
aspartate-CBZ	193663	370771	774625	927831	1043747	1036211	877917
ATP-nega	73078	71000	26296	8313	7660	8135	6972
citrate	17040	19304	18876	21754	28015	19196	15135
citrate/isocitrate	167514	170867	141062	205238	258003	172507	151308
citrulline-CBZ	18548	25791	29849	24978	16254	18969	13502
coenzyme A-nega	606	890	1811	2395	1560	1754	1263
CTP/UTP-nega-IS	23519	25521	25648	26678	26138	25304	23602
CTP-nega	20947	24237	16625	3649	5767	4297	3736
dATP-nega	5448	4602	2580	1206	770	980	325
dCTP-nega	5469	5702	5103	1412	1645	1217	800
dGDP	2556	3631	1117	1145	425	997	768
D-glucono-δ-lactone-6-phosphate	3713	4071	4019	2923	4106	4334	3890
D-glyceraldehyde-3-phosphate	487	1249	2216	4273	5059	5368	3506
dihydroorotate	5593	8464	340	182	124	106	100
dihydroxy-acetone phosphate	11258	10227	15802	52639	44476	34990	39183
D-sedoheptulose-7-phosphate	5429	4660	6492	6094	8037	6254	6028
dTTP-nega	13558	11284	3808	1408	355	196	236
dUMP-nega	100	1178	12795	1776	1461	1097	1333
fructose-1,6-bisphosphate	11375	15704	25939	90184	90420	91141	79028
fructose-6-phosphate	1465	1005	3368	2940	3037	3847	2926
fumarate C12	973	1069	1544	956	1351	776	815
geranyl-PP	9847	10471	11029	10643	11829	12081	11669
glucose-1-phosphate	2016	1442	3738	2873	4358	1645	3096
glucose-6-phosphate	2005	3336	6432	5211	6169	5684	4851
glutamate-CBZ	6335557	7791006	6916042	6798112	6925970	6609872	4933444
glutamate-CBZ-C13N15-IS	166774	140791	104755	121105	112583	117930	111455
glutamine-CBZ	446575	452535	583411	504063	505663	486770	396814
glutathione disulfide-nega	63257	75642	69478	62947	51171	77936	50259
glutathione-nega	96972	129183	130951	97027	59811	19210	37999
glycine-CBZ	415091	457873	414859	415173	386950	374288	345564

GTP-nega	3818	4287	841	957	992	634	329
hexose-phosphate	11521	8859	20712	22922	24800	23953	19013
histidine-CBZ	12637	11717	19231	2551	4049	3703	4099
homocysteine-MMTS	32678	27879	28768	24053	19343	16778	11945
Indoleacrylic acid	1872	1365	1507	1010	926	1324	940
leucine/isoleucine-CBZ	44692	40505	107184	141152	138564	158932	143322
lysine-CBZ	141051	208829	872415	528983	542624	661985	698475
malate	63602	41198	77975	24008	32525	26138	20687
methionine-CBZ	5137472	5437916	5245103	4741120	4965412	4749038	4349665
Methylmalonic acid	53074	29951	47194	26970	30314	25091	20114
N-Acetyl-L-alanine	205	100	145	100	533	1254	1242
NAD+_nega	28573	33341	40886	43331	52043	55520	52402
NADP+_nega	15700	17401	17302	17213	14481	12202	4265
NADPH_nega	3841	4038	3808	2538	1846	1754	1038
N-Carbamoyl-L-aspartate	27897	22788	775	173	239	100	100
ornithine-CBZ	10882	10929	74713	46354	28599	29567	17998
orotate	30102	16660	3978	1857	1467	1412	649
pantothenate	100	100	158	1864	4638	4172	1522
phenylalanine-CBZ	719	387	8751	14646	17795	22864	21173
phenylpyruvate	2598	974	5563	10838	15543	19555	12737
phosphoenolpyruvate	1802	2311	5712	7044	12913	12858	15575
p-hydroxybenzoate	1249	819	1260	1369	1839	1332	1958
prephenate	1111	757	8757	15615	18096	21751	26313
proline-CBZ	67550	59735	56342	21244	19804	18430	15550
pyruvate	953	959	5090	2020	5213	7090	8983
quinolinate	15252	12346	14625	13521	12795	14150	11854
ribose-phosphate	7924	7731	15233	12225	12250	12229	12467
S-adenosyl-L-methionine MMTS	5625	2996	4636	3834	5202	5389	6464
S-adenosyl-L-methionine pos	9764	4320	5153	5552	3917	7527	9161
serine-CBZ	57063	39658	71192	8120	8178	5576	5534
shikimate-3-phosphate	524	420	297	711	1618	1077	1761
sn-glycerol-3-phosphate	3986	4265	3112	5032	7450	5026	4772
S-ribosyl-L-homocysteine-nega	378	382	220	295	269	451	141
succinate C12	1284	582	1675	905	958	523	436
threonine-CBZ	63041	55482	118594	66463	61338	67767	56056
threonine-CBZ-C13	7542	6257	3936	3317	3911	3365	3943
trehalose	243	100	100	112	100	293	928
trehalose 6-Phosphate	100	100	152	100	530	798	1217
trptophan-CBZ	4728	3642	25383	37391	19167	23108	15435
tyrosine-CBZ	6974	5933	109899	323015	346044	390270	362624
UDP-D-glucose	294122	336048	422503	378274	439688	548520	453208
UDP-D-glucuronate	100278	84995	106272	67756	69826	61832	55939
UDP-N-acetyl-glucosamine	64970	76664	45836	30372	38359	38713	29659
UDP-nega	1171	1750	1468	1209	787	1155	339
UTP-nega	31465	37366	32239	17208	18863	20195	17893
valine-CBZ	70135	65759	378579	2205387	2008258	2327194	1866081

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.400	0.400	0.413	0.425	0.450	0.500	0.600
2,3-dihydroxybenzoate	1050	328	5077	30552	34304	33855	26160
2,3-Diphosphoglyceric acid	214	436	196	748	733	796	432
2-Hydroxy-2-methylbutanedioic acid	30178	14335	10056	10781	9340	8396	10520
2-Isopropylmalic acid	44457	28751	19165	12047	8283	11122	20258
3-phosphoglycerate	2647	1822	2161	2567	2288	2101	3296
5-phosphoribosyl 1-pyrophosphate	3912	4184	5274	6184	3100	1678	2648
6-phospho-D-gluconate	2216	1883	1187	106	327	257	467
acetyl-CoA-nega	9927	9549	7614	6417	4762	2842	2975
acetylphosphate	6026	4036	3893	4527	5036	6729	5904
aconitate	1566	685	711	1400	2173	1727	1730
adenosine 5'-phosphosulfate	322	390	423	452	427	869	211
ADP-nega	673	825	611	735	385	627	1457
a-ketoglutarate	3527	3721	4518	5171	5493	5030	6515
alanine-CBZ	215913		205481	511415	611520	603300	370070
alanine-CBZ-C13N15-IS	257587		286378	243535	247668	263512	223991
AICAR	100	461	2061	5593	7873	3009	4257
arginine-CBZ	4787	100	66	12837	15181	17121	10768
Ascorbic acid	176	100	100	100	1088	2128	12191
asparagine-CBZ	24030		35796	53507	53728	64547	35289
Aspartate-(U-13C/15N)-(neg)	4039	5062	4509	4546	4886	4740	4044
aspartate-CBZ	78639		139206	196011	169502	203941	110858
ATP-nega	15389	14456	15766	19987	19566	20302	20292
carbamoyl-phosphate	265	179	525	604	1030	778	951
Cholesteryl sulfate	166	246	132	304	180	448	382
citrate	2149	2800	2728	2917	2763	2539	2528
citrate/isocitrate	26789	23699	20060	19089	26179	16730	24200
citrulline-CBZ	10225		8317	13865	11760	10829	13113
coenzyme A-nega	280	300	672	662	488	519	632
CTP/UTP-nega-IS	8260	10465	12245	11093	10721	11934	13237
CTP-nega	5406	4842	5508	9567	9937	8112	11317
dATP-nega	1328	1581	1075	2994	4046	3644	2910
dCTP-nega	942	1346	1585	1348	896	1259	1248
D-glucono-δ-lactone-6-phosphate	460	776	556	503	520	223	519
D-glyceraldehyde-3-phosphate	1571	1880	1542	1866	1941	2272	2483
dihydroxy-acetone phosphate	2552	1711	2167	2519	2434	2116	2695
D-sedoheptulose-7-phosphate	2801	2394	1870	1638	1121	1254	1859
dTTP-nega	3524	3907	1917	1151	209	168	100
dUMP-nega	100	660	10687	12239	10943	10395	8810
fructose-1,6-bisphosphate	28252	36411	31805	26061	26528	15878	17540
fructose-6-phosphate	599	453	1229	786	587	624	216
fumarate 3-3	100	100	100	100	164	657	2336
geranyl-PP	512	808	334	372	628	455	658
glucose-1-phosphate	262	324	292	634	317	268	325
glutamate-CBZ	5309526	219	6214422	7394751	7507679	8311465	7234194
glutamate-CBZ-C13N15-IS	89697		90447	76624	70431	72922	61657
glutamine-CBZ	255443		333950	453135	458145	539292	303259
glutathione disulfide-nega	7618	6558	8180	10656	8485	5881	9995
glutathione-nega	77477	79056	72892	62743	58343	48998	44306
glycine-CBZ	249073		351602	381979	374384	377977	395196
GTP-nega	5450	7012	5202	9226	7255	7105	6663
hexose-phosphate	6560	5211	5744	6402	5087	5055	5088

histidine-CBZ	4700		4445	2632	2675	3058	3462
homocysteine-MMTS	32553	32175	109513	115805	128262	116517	164488
hypoxanthine	2418	1412	1510	2930	2653	3104	3200
Indoleacrylic acid	1437	622	1142	895	582	389	433
inosine	233499	326971	338183	269207	256818	250224	241004
leucine/isoleucine-CBZ	34222		43104	314106	628388	908055	920845
lysine-CBZ	178330		288679	1064106	1523190	1885373	1513764
malate	10273	7357	10116	14564	11326	9853	10663
Maleic acid	940	789	1182	921	846	584	724
methionine-CBZ	17538		4015	1418	956	1174	8920
Methylmalonic acid	40319	16984	18717	18599	16892	15733	36332
NAD+_nega	27681	26065	23136	32977	34641	37647	40005
NADP+_nega	8715	10426	5354	9033	5162	6080	8249
NADPH_nega	2336	2442	2927	3753	1988	2863	4240
N-Carbamoyl-L-aspartate	6622	7304	6430	5725	4577	2443	2004
ornithine-CBZ	17659		18376	14437	10100	8550	20320
orotate	6384	3063	2734	4235	4630	4415	8183
phenylalanine-CBZ	260		1270	2788	3627	2848	2351
phenylpyruvate	130	100	100	547	1405	948	1172
phosphoenolpyruvate	604	472	99	917	562	1019	1111
p-hydroxybenzoate	844	290	429	924	690	615	842
prephenate	130	100	100	2027	2568	1951	1473
proline-CBZ	37638		40026	54461	98004	124632	115893
pyruvate	408	269	199	530	409	1444	3328
ribose-phosphate	6101	10313	15205	6668	5306	4545	4626
S-adenosyl-L-methionine	6054	2815	341	100	257	100	100
S-adenosyl-L-methionine - POS	3988	2645	100	177	100	100	490
serine-CBZ	8269		3469	2883	3131	2893	5673
shikimate-3-phosphate	2390	1779	2496	1732	2732	1609	1182
sn-glycerol-3-phosphate	488	697	161	462	582	661	460
S-ribosyl-L-homocysteine-nega	197	783	330	1026	3189	5155	5920
succinate C12	1469	418	259	275	662	354	997
threonine-CBZ	37556		43744	102986	175501	390466	807660
threonine-CBZ-C13	3721		3755	4167	3746	3633	2152
trptophan-CBZ	1721		3727	8262	8980	6903	7134
tyrosine-CBZ	2684		16992	53184	80808	78303	69685
UDP-D-glucose	106867	117429	110444	122696	121471	122413	120978
UDP-D-glucuronate	36929	36989	32330	39837	33986	34369	31894
UDP-N-acetyl-glucosamine	24698	23225	23167	33601	35624	32313	26721
uracil	100	100	100	100	112	170	1060
UTP-nega	9237	10528	12687	21755	19996	19581	22430
valine-CBZ	53087		71670	840396	1018784	370489	155204
xanthosine	1031	394	633	467	442	374	731

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.400	0.400	0.413	0.425	0.450	0.500	0.600
2,3-dihydroxybenzoate	469	358	7005	40564	39976	47991	28222
2,3-Diphosphoglyceric acid	476	588	784	1557	783	1175	1243
2-Hydroxy-2-methylbutanedioic acid	34224	10758	7911	10075	9060	12824	12340
2-Isopropylmalic acid	43514	28026	21242	11577	11142	14156	18900
3-phosphoglycerate	2927	2695	1673	2501	2281	2346	3331
5-phosphoribosyl 1-pyrophosphate	4995	4110	9325	7941	3492	4019	2138
6-phospho-D-gluconate	3555	1153	1829	348	159	229	1011
acetyl-CoA-nega	3020	3931	5231	5895	9293	11181	8449
acetylphosphate	6142	3707	3848	5052	5860	5953	4957
aconitate	1290	864	1117	1126	1317	2788	1651
adenosine 5'-phosphosulfate	987	131	706	801	989	1074	700
ADP-nega	1168	1197	942	724	868	843	987
a-ketoglutarate	3808	3286	5529	5663	6180	5451	8120
alanine-CBZ	208495	180269	200045	147	531841	516411	434520
alanine-CBZ-C13N15-IS	263611	278857	223312	95	218246	184971	218578
AICAR	243	112	2728	5397	3137	4834	4878
arginine-CBZ	4787	100	100	100	15187	17121	12761
Ascorbic acid	422	100	100	176	1167	2626	14053
asparagine-CBZ	22292	31334	35573		50242	44562	49117
Aspartate-(U-13C/15N)-(neg)	3492	3959	4665	4568	3926	3512	3576
aspartate-CBZ	86080	101682	168637		179409	137999	136100
ATP-nega	17290	18043	18268	23436	31271	34450	22673
carbamoyl-phosphate	110	273	272	821	1006	1062	1469
Cholesteryl sulfate	396	316	191	290	304	313	539
citrate	2913	2973	4134	3132	3726	3391	1750
citrate/isocitrate	24401	25245	30754	25676	20607	38284	14705
citrulline-CBZ	9523	11405	9439		13201	9596	14144
coenzyme A-nega	608	284	592	825	2517	2798	616
CTP/UTP-nega-IS	10024	12591	11955	12516	12997	13979	11182
CTP-nega	7211	8811	6435	13690	12407	17164	11828
dATP-nega	1596	2032	2577	3605	7542	6188	4102
dCTP-nega	1695	1387	1284	1841	1343	1119	1273
D-glucono-δ-lactone-6-phosphate	453	234	346	779	420	779	771
D-glyceraldehyde-3-phosphate	2052	2499	1987	2172	2870	2247	2601
dihydroxy-acetone phosphate	1804	1906	2515	2706	3411	2271	2154
D-sedoheptulose-7-phosphate	3770	1972	2457	1783	1136	1186	1488
dTTP-nega	4354	4887	1721	1099	632	243	214
dUMP-nega	100	708	9005	9883	10870	13176	14686
fructose-1,6-bisphosphate	34432	51786	40290	29476	22616	19258	13098
fructose-6-phosphate	1176	656	521	912	340	1031	561
fumarate 3-3	100	100	150	123	143	623	1986
geranyl-PP	452	668	478	455	798	459	347
glucose-1-phosphate	744	901	368	885	164	340	403
glutamate-CBZ	6061156	6886865	7229650		7972799	7514420	7906313
glutamate-CBZ-C13N15-IS	85133	78988	77407		63446	50564	64618
glutamine-CBZ	252708	304684	345129		434895	369463	417893
glutathione disulfide-nega	18372	17882	19873	21169	24225	23786	11006
glutathione-nega	60891	65388	65652	67660	46964	41414	36419
glycine-CBZ	252369	386887	389840		390945	369140	401345
GTP-nega	8248	6721	8397	14795	12292	11933	6159
hexose-phosphate	8522	7030	8220	6599	4683	6252	4396

histidine-CBZ	6836	7016	6291		3279	3186	2919
homocysteine-MMTS	23318	23961	81572	92836	98744	88745	136116
hypoxanthine	2782	1025	2012	2836	3495	4062	3895
Indoleacrylic acid	660	1319	1509	990	756	1103	897
inosine	216555	351358	337342	307709	304147	286202	239642
leucine/isoleucine-CBZ	34042	38290	48079		583967	990550	1085204
lysine-CBZ	172640	213279	291857		1391534	1400903	1957773
malate	13379	8099	9732	15014	15616	13888	13986
Maleic acid	666	1141	1186	952	1094	1087	530
methionine-CBZ	18248	14469	4082		736	1116	1409
Methylmalonic acid	18666	16107	17842	21125	17496	19319	17559
NAD+_nega	27316	27967	28304	34212	45797	52358	48035
NADP+_nega	8290	8876	8535	8568	11823	9826	12556
NADPH_nega	3501	2547	3464	2808	5315	5846	3903
N-Carbamoyl-L-aspartate	9234	8061	6167	6823	5014	3378	3023
ornithine-CBZ	18688	20128	14774		10041	8461	21171
orotate	7210	3485	3426	3639	5480	5765	9350
phenylalanine-CBZ	260	378	1437		2679	4208	2699
phenylpyruvate	159	100	185	399	1165	1982	2399
phosphoenolpyruvate	251	632	534	817	1063	828	1328
p-hydroxybenzoate	704	172	242	487	671	1013	964
prephenate	131	190	592	2324	2939	2111	2074
proline-CBZ	51486	37931	43890		106124	163950	152905
pyruvate	508	264	101	414	952	1963	4463
ribose-phosphate	6988	14709	15662	8076	5531	5056	4781
S-adenosyl-L-methionine	4319	2901	668	100	100	100	100
S-adenosyl-L-methionine - POS	4398	1935	394	241	100	100	100
serine-CBZ	10070	7535	3723		2913	3944	3722
shikimate-3-phosphate	1647	1193	2011	1370	1392	1402	1715
sn-glycerol-3-phosphate	633	778	519	629	348	352	486
S-ribosyl-L-homocysteine-nega	348	302	163	986	2615	5307	8358
succinate C12	699	432	422	368	271	493	236
threonine-CBZ	40206	38492	48127		189694	373994	952161
threonine-CBZ-C13	3268	3180	3551		2998	2399	2943
trptophan-CBZ	2203	2228	6338		9272	9998	7192
tyrosine-CBZ	3036	4713	21168		85192	118205	98102
UDP-D-glucose	111610	100478	121043	133991	149682	163263	148406
UDP-D-glucuronate	42620	39634	45986	46853	48016	49699	44431
UDP-N-acetyl-glucosamine	23564	15047	26582	30601	46989	48015	36394
uracil	100	100	100	100	235	867	852
UTP-nega	11389	11769	19867	25887	30913	33297	25323
valine-CBZ	56515	61196	93121		1163685	441656	178017
xanthosine	608	396	185	868	1100	466	772

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino + met replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.470	0.470	0.503	0.536	0.601	0.733	0.995
1,3-diphosphateglycerate	100	100	117	603	358	399	625
2,3-dihydroxybenzoate	548	570	21162	79907	155919	280457	391193
2,3-Diphosphoglyceric acid	272	495	1670	1613	2674	3534	3104
2-Hydroxy-2-methylbutanedioic acid	24805	12075	9213	10307	11340	15533	33555
2-Isopropylmalic acid	115857	78143	68445	50924	71451	92051	121044
2-oxo-4-methylthiobutanoate	1801	1105	1758	2002	1161	2581	3841
3-phosphoglycerate	5009	6268	8206	8761	6670	8676	13850
5-phosphoribosyl 1-pyrophosphate	1291	1525	3771	3265	11209	17347	9866
6-phospho-D-gluconate	5593	5490	5804	2676	3129	2627	4626
acetyl-CoA-nega	2147	4171	3575	4903	8267	5791	8246
acetylphosphate	9250	7156	7853	11709	15732	30606	54230
aconitate	2051	833	803	1406	951	1533	2463
adenosine 5'-phosphosulfate	236	815	652	589	788	453	815
ADP-nega	406	270	528	993	1059	623	1136
a-ketoglutarate	5601	4151	6014	8125	8305	8578	13094
alanine-CBZ	100249	94294	182780	191574	207748	222081	296246
alanine-CBZ-C13N15-IS	349179	395158	377288	330407	392462	408797	381651
AICAR	100	100	354	1422	1959	2392	2489
arginine-CBZ	2776	3472	3174	3910	6339	8487	13667
Ascorbic acid	100	103	194	6522	5630	7088	19989
asparagine-CBZ	63989	72873	92946	75829	143394	169290	219470
Aspartate-(U-13C/15N)-(neg)	4381	4364	5627	6008	4276	4791	5549
aspartate-CBZ	90858	118336	199057	161832	300992	381317	451327
ATP-nega	15211	17175	24018	25337	24481	37976	44948
carbamoyl-phosphate	130	140	145	260	339	482	1471
citrate	2969	2911	3253	3030	3433	3189	2860
citrate/isocitrate	21242	21231	25620	22214	21818	20325	21044
citrulline-CBZ	13867	13528	18779	18319	20780	23748	26462
CTP/UTP-nega-IS	6395	12320	17755	18169	20111	20776	25624
CTP-nega	2513	4329	6528	5728	8433	11129	15956
dATP-nega	366	660	1939	4861	6687	8160	11669
dCTP-nega	652	806	2331	1055	1844	5132	17969
D-glucono-δ-lactone-6-phosphate	400	350	382	350	914	453	813
D-glyceraldehyde-3-phosphate	5423	5143	5701	6924	6278	9658	12344
dihydroorotate	655	421	406	1582	1546	798	1221
dihydroxy-acetone phosphate	5943	6618	6296	6773	7591	9125	11450
D-sedoheptulose-7-phosphate	5978	4028	3911	2196	4006	3973	4185
dTTP-nega	2339	3025	768	113	115	12.56	31.52
dUMP-nega	100	1411	24463	19676	12997	25670	34388
dUTP-nega	128	100	133	100	100	479	1207
fructose-1,6-bisphosphate	6831	8116	9798	7794	7419	11344	9484
fructose-6-phosphate	1197	863	1124	1389	1387	720	639
geranyl-PP	2407	2472	1988	1691	1713	1849	1779
glucose-1-phosphate	1219	437	527	943	1235	850	909
glutamate-CBZ	4068959	4555198	5580247	5553068	7088445	8323690	9532798
glutamate-CBZ-C13N15-IS	168024	179029	162828	141137	152639	145346	121284
glutamine-CBZ	273384	272604	368957	328186	495716	642609	771458
glutathione disulfide-nega	3579	5422	7531	6939	12776	13408	20303
glutathione-nega	61237	59398	63188	67574	85566	100091	132693
glycine-CBZ	549941	613564	624235	571762	575775	550710	462551
GTP-nega	5292	8910	16179	13469	19475	19848	25391

hexose-phosphate	13482	9304	10254	9165	11110	12024	11310
histidine-CBZ	6181	5934	5962	3865	5837	6107	8036
homocysteine-MMTS	18864	14788	13306	17175	18697	34279	62855
Indoleacrylic acid	2006	1554	2210	1722	1832	1637	1984
leucine/isoleucine-CBZ	39781	32451	55901	51230	57563	55602	60506
lysine-CBZ	114745	142297	255858	185899	305304	483325	838838
malate	23217	22191	30289	30185	35217	41321	53821
methionine-CBZ	6179159	6455093	6542015	5694447	6108255	6309812	6305593
NAD+_nega	23494	25626	27043	29652	38161	52009	60567
NADP+_nega	5165	6602	6332	5627	7301	8173	10083
NADPH_nega	2479	1925	3503	4533	4613	5700	4931
N-Carbamoyl-L-aspartate	25652	25612	22406	67860	31283	15977	10702
ornithine-CBZ	12828	13399	19549	16535	28262	31983	45220
orotate	7188	5130	6028	15365	15336	20884	23694
phenylalanine-CBZ	219	151	2914	2480	3112	4109	5307
phenylpyruvate	1530	396	459	1568	2549	3885	7013
phosphoenolpyruvate	506	601	989	1104	1360	2439	3625
p-hydroxybenzoate	521	439	792	974	1419	1709	2406
prephenate	280	221	1920	3017	3478	6471	8425
proline-CBZ	32494	29418	29984	36725	42922	67225	93038
pyruvate	321	131	686	2611	2725	4884	5755
ribose-phosphate	7432	13074	11726	7833	8032	16312	16656
S-adenosyl-L-methionine	3441	2055	3863	2671	2250	3438	3982
S-adenosyl-L-methionine MMTS	5261	2023	3517	3069	3208	4827	4899
serine-CBZ	24455	15713	7889	8214	13089	12703	15912
shikimate-3-phosphate	1098	1605	725	1113	1137	1533	1056
sn-glycerol-3-phosphate	1124	422	1683	1238	2149	2451	3774
S-ribosyl-L-homocysteine-nega	222	248	199	450	442	544	1744
succinate C12	510	239	157	402	362	196	555
threonine-CBZ	40493	38584	66505	61786	74722	102203	117919
threonine-CBZ-C13	8609	9063	7753	7537	9322	8566	9111
trptophan-CBZ	3608	2586	11298	11174	12610	16475	15763
tyrosine-CBZ	2359	2667	19958	26534	29192	37360	48051
UDP-D-glucose	175233	179441	184011	138106	279222	341992	326630
UDP-D-glucuronate	43994	37449	43149	40700	61530	71060	61854
UDP-N-acetyl-glucosamine	33840	34325	36929	49092	69261	62866	65702
UTP-nega	10347	11461	13693	12618	33129	42073	58650
valine-CBZ	34592	29685	86663	97099	61258	81714	164924
xanthosine	1041	1476	953	1442	3499	2688	2534

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino + met replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.470	0.470	0.503	0.536	0.601	0.733	0.995
1,3-diphosphateglycerate	100	154	163	429	269	978	673
2,3-dihydroxybenzoate	1497	198	20361	90956	184179	310621	457915
2,3-Diphosphoglyceric acid	1138	1946	1410	3425	4594	4615	4503
2-Hydroxy-2-methylbutanedioic acid	27497	11296	9465	10792	8794	11551	26262
2-Isopropylmalic acid	107808	99765	69185	57203	69007	90362	121285
2-oxo-4-methylthiobutanoate	1529	2706	1669	1315	1838	2526	4041
3-phosphoglycerate	8748	7207	8011	7776	8566	10643	13958
5-phosphoribosyl 1-pyrophosphate	4206	6192	4688	7115	14351	23224	19086
6-phospho-D-gluconate	7609	9381	6066	1988	2253	4818	5495
acetyl-CoA-nega	2677	1934	1613	2793	1745	3918	4522
acetylphosphate	5912	4559	5481	9143	10439	16092	39324
aconitate	1780	1626	1276	1596	2110	1395	2342
adenosine 5'-phosphosulfate	590	228	752	700	447	775	1250
ADP-nega	504	1143	551	530	1226	870	1846
a-ketoglutarate	6644	5521	5753	8181	8613	8300	11607
alanine-CBZ	70246	72027	182596	214822	207190	227268	318018
alanine-CBZ-C13N15-IS	247185	292357	356537	363726	414073	413472	349277
AICAR	100	100	178	945	2013	1671	1931
arginine-CBZ	1904	2639	2969	4293	7085	9282	12524
Ascorbic acid	217	100	103	9592	9416	11978	18716
asparagine-CBZ	52617	55749	90644	87513	131223	169441	209675
Aspartate-(U-13C/15N)-(neg)	5044	3681	5076	4917	5118	4237	5457
aspartate-CBZ	41091	86066	173758	156753	271640	347967	385307
ATP-nega	21797	29192	27593	33601	25308	40070	59939
carbamoyl-phosphate	129	100	100	148	154	474	1169
citrate	4060	3840	4245	3124	3219	2786	2949
citrate/isocitrate	31199	29329	27893	23896	17426	18399	20606
citrulline-CBZ	9062	11098	16553	18468	23767	23453	27374
CTP/UTP-nega-IS	14393	22673	21483	19880	24148	22226	25387
CTP-nega	6150	12890	7463	5452	8628	11780	17215
dATP-nega	1346	1954	1714	7407	7030	8921	17755
dCTP-nega	1479	2009	1126	1883	2391	4675	21034
D-glucono-δ-lactone-6-phosphate	423	356	918	478	708	609	676
D-glyceraldehyde-3-phosphate	5445	5978	5823	6145	6749	8452	10882
dihydroorotate	1106	667	798	1369	1763	2135	801
dihydroxy-acetone phosphate	6548	5871	7348	6915	7462	9024	12378
D-sedoheptulose-7-phosphate	4843	5290	4102	2090	2310	4954	4668
dTTP-nega	3057	4259	692	306	22.66	129.61	76.78
dUMP-nega	100	3169	32765	18818	12149	28106	33384
dUTP-nega	100	143	124	100	290	464	2012
fructose-1,6-bisphosphate	9015	12396	7285	11519	7903	12578	11627
fructose-6-phosphate	1629	1493	802	1704	1663	2051	1522
geranyl-PP	1726	1636	2275	2233	2591	1976	1998
glucose-1-phosphate	714	995	1143	1264	420	1353	1325
glutamate-CBZ	2449306	3813456	5078532	5569617	6819740	7895786	8569264
glutamate-CBZ-C13N15-IS	117759	135121	157340	135296	157987	135841	90555
glutamine-CBZ	200712	215923	331052	326420	492914	578456	645501
glutathione disulfide-nega	26035	31375	30392	23005	33256	37672	41898
glutathione-nega	40462	38455	42084	56835	63595	91322	110039
glycine-CBZ	499572	537733	573402	559274	524825	531526	462424
GTP-nega	12575	17512	20722	14736	20194	22715	29720

hexose-phosphate	11657	14412	10049	11050	12348	12265	15844
histidine-CBZ	5680	4215	6962	3790	4251	5008	8995
homocysteine-MMTS	12096	8172	7217	13756	14821	22860	46307
Indoleacrylic acid	2789	1411	2037	2459	2976	2536	2450
leucine/isoleucine-CBZ	30127	30100	57542	54905	54228	51667	61076
lysine-CBZ	48439	76735	214919	185422	268070	462752	728998
malate	23767	26915	29027	30491	30584	34269	48412
methionine-CBZ	5561926	5791986	6303634	5973005	6191949	6118010	5544457
NAD+_nega	30086	27760	27544	32091	39699	49763	68291
NADP+_nega	5219	8787	5885	4030	6511	8529	10398
NADPH_nega	3336	4032	3550	3666	2462	5929	8166
N-Carbamoyl-L-aspartate	37419	32062	24179	72643	35926	20270	11951
ornithine-CBZ	7054	9766	18734	18617	28187	26739	33501
orotate	15671	8365	7016	19643	23115	26033	29848
phenylalanine-CBZ	260	185	3010	2428	3303	4430	5176
phenylpyruvate	954	1094	902	2416	2742	5358	6313
phosphoenolpyruvate	675	906	548	1686	2329	2118	4451
p-hydroxybenzoate	771	317	578	604	923	1758	2425
prephenate	215	256	2422	2892	2762	5839	7633
proline-CBZ	34126	35718	29751	38818	44771	63771	97382
pyruvate	384	244	687	3662	3808	3646	5447
ribose-phosphate	8262	11831	10716	6966	8267	12345	17662
S-adenosyl-L-methionine	3539	3893	2059	3301	3814	3607	2936
S-adenosyl-L-methionine MMTS	4919	1955	1881	2248	2660	4658	4967
serine-CBZ	19150	11421	7891	5814	10487	11881	12504
shikimate-3-phosphate	587	572	926	795	734	1926	870
sn-glycerol-3-phosphate	1374	1527	1400	2227	1537	3220	5349
S-ribosyl-L-homocysteine-nega	206	160	164	455	326	535	1629
succinate C12	1346	411	585	883	535	491	528
threonine-CBZ	33421	34341	65031	66969	79317	101084	126608
threonine-CBZ-C13	7690	5523	8338	7508	7303	7411	8325
trptophan-CBZ	3558	2026	11427	11939	11787	14368	15840
tyrosine-CBZ	3296	2751	24132	31270	30362	39833	53540
UDP-D-glucose	197234	189524	161203	123185	303745	339516	342343
UDP-D-glucuronate	44656	39949	51373	36591	47888	56595	67169
UDP-N-acetyl-glucosamine	32694	38206	27749	40593	61929	64886	76701
UTP-nega	13342	20904	18413	14605	29329	44777	73218
valine-CBZ	29385	26244	92950	81474	55325	73581	145001
xanthosine	2070	1498	1192	2000	3895	3764	2732

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino + met + thy replicate 1 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.450	0.450	0.484	0.518	0.587	0.724	0.998
1,3-diphosphateglycerate	601	100	109	100	187	495	658
2,3-dihydroxybenzoate	1211	912	19851	95674	224888	361702	530192
2,3-Diphosphoglyceric acid	2715	2331	1671	1131	3894	4567	4808
2-Hydroxy-2-methylbutanedioic acid	3095	2170	670	395	1833	2363	4525
2-Isopropylmalic acid	128054	87706	44605	23651	63070	82445	82194
2-oxo-4-methylthiobutanoate	2321	2968	2542	2921	3227	6503	5099
3-phosphoglycerate	4830	5294	6102	4658	5622	7659	10760
5-phosphoribosyl 1-pyrophosphate	4825	5744	1997	353	8682	23563	20106
6-phospho-D-gluconate	11848	6862	7152	3374	5580	8114	5882
acetyl-CoA-nega	4836	4179	2049	2177	4920	5619	7720
acetylphosphate	14784	10100	12148	14112	21917	39498	74650
aconitate	2288	1481	1421	1879	1978	1976	1761
adenosine 5'-phosphosulfate	958	777	170	934	1594	544	343
ADP-D-glucose	373	337	100	100	125	100	196
ADP-nega	1666	1924	818	1635	1078	967	1829
a-ketoglutarate	7748	6827	7697	11189	11419	11865	14389
alanine-CBZ	156624	144834	191673	323934	243282	215816	307651
alanine-CBZ-C13N15-IS	432149	518106	378023	385181	397760	353401	393308
AICAR	100	340	3949	10377	18694	36458	34522
arginine-CBZ	4414	6405	5040	4967	7219	7871	9291
Ascorbic acid	369	144	100	7368	12484	10738	32158
asparagine-CBZ	66325	93528	87010	104703	121659	132266	194597
Aspartate-(U-13C/15N)-(neg)	8302	7586	8650	5139	7263	7569	7074
aspartate-CBZ	133714	245036	250641	268080	353640	387277	519230
ATP-nega	16323	14418	5679	4479	5674	14233	14532
carbamoyl-phosphate	317	212	276	100	1144	3620	2782
Citraconic acid	1766	2121	2706	1782	3105	3052	3850
citrate	2607	4931	2085	682	1303	1291	2072
citrate/isocitrate	20083	32351	13139	4241	9961	13232	15877
citrulline-CBZ	9699	13687	15130	17754	22075	18174	21678
CTP/UTP-nega-IS	10197	8636	3780	2461	4927	7622	8127
CTP-nega	4996	4318	1719	764	1014	4451	5675
dATP-nega	1066	1392	478	591	123	593	1479
dCTP-nega	871	962	299	328	725	728	896
dGDP	2313	1794	1362	1019	1610	2367	1725
D-glucono-δ-lactone-6-phosphate	559	631	1425	702	845	874	541
D-glyceraldehyde-3-phosphate	5339	6119	5911	5177	7286	9174	12605
dGTP-nega	17491	13758	6933	3853	5488	15729	12735
dihydroorotate	1168	513	787	1791	1498	908	430
dihydroxy-acetone phosphate	6526	4907	6370	5976	7047	10598	13186
D-sedoheptulose-7-phosphate	8003	5441	6801	3658	7221	10857	7958
dTTP-nega	1982	2138	42	120	284	1359	1788
dUMP-nega	100	1794	20755	28236	23034	22662	15463
fructose-1,6-bisphosphate	32089	42935	33106	26208	32735	44750	52584
fructose-6-phosphate	2276	1703	1692	2172	2235	3113	2800
geranyl-PP	1866	2301	1720	1638	1995	1880	1595
glucose-1-phosphate	1833	900	978	754	2835	1562	1052
glucose-6-phosphate	5250	4342	3589	3484	4087	6135	4774
glutamate-CBZ	4330008	5599114	5171031	6706337	6990089	6626361	8696938
glutamine-CBZ	282948	393579	362129	428465	474606	508583	698229
glutathione disulfide-nega	4436	6253	5505	5753	10307	13848	15801

glutathione-nega	92170	76789	69548	60973	93134	125493	144672
glycerate	3441	3197	2722	974	2486	3202	2463
glycine-CBZ	494729	565701	521903	467942	464341	487564	384692
GTP-nega	6342	5364	14	71	2451	5377	6355
hexose-phosphate	17409	13734	17147	12590	18769	20420	16642
histidine-CBZ	8649	9701	10202	6656	7283	7098	7700
homocysteine-MMTS	17821	16480	11421	21314	32776	41042	68720
hypoxanthine	3576	2305	2400	1218	1077	883	1259
Indoleacrylic acid	3231	4377	1952	3914	3827	3058	2178
leucine/isoleucine-CBZ	70653	42151	47904	57415	46327	43727	45128
lysine-CBZ	131818	208751	219780	245040	237597	309305	663705
malate	40107	36802	24407	15661	34256	44508	47042
Maleic acid	2615	2606	2731	2981	1918	1664	2773
methionine-CBZ	5272089	5761209	5499604	5191885	5130584	4928845	4966273
Methylmalonic acid	75875	33231	19437	24017	42027	27348	29281
NAD+_nega	25541	29854	30141	27105	41263	59957	62472
NADP+_nega	12113	13266	11268	9215	12795	21205	18353
NADPH_nega	3847	2776	1797	1469	2534	8570	4147
N-Carbamoyl-L-aspartate	35142	28331	29417	98819	43065	24721	15133
ornithine-CBZ	10983	18931	19430	23044	20145	20441	44592
orotate	17789	6419	6036	8478	15341	22744	29055
phenylalanine-CBZ	1568	106	1701	2265	2895	4627	4782
phenylpyruvate	1672	405	478	2250	4324	8163	13066
phosphoenolpyruvate	485	760	1279	2084	2753	3163	5504
p-hydroxybenzoate	1202	648	886	1032	1414	2136	2583
prephenate	171	100	430	1342	2147	3625	6173
proline-CBZ	56995	43525	48789	50527	52657	122422	115439
pyruvate	1113	597	825	4976	7320	5822	10445
quinolinate	434	334	229	100	100	122	192
ribose-phosphate	2758	2184	2732	2132	2305	3826	4814
S-adenosyl-L-methionine	857	230	229	1351	429	1968	861
S-adenosyl-L-methionine MMTS	1139	193	471	943	306	1345	658
serine-CBZ	20716	21405	11446	7354	8564	9576	12530
shikimate-3-phosphate	929	1230	986	338	530	609	1104
sn-glycerol-3-phosphate	2837	1513	1469	1349	1865	3352	3034
S-ribosyl-L-homocysteine-nega	620	733	349	1015	1614	1935	2567
succinate C12	2780	1124	570	447	1200	316	611
threonine-CBZ	70588	73130	80836	98355	90489	117851	123041
threonine-CBZ-C13	6822	9576	7979	9039	7426	7136	8497
trehalose 6-Phosphate	100	100	100	100	153	241	387
trptophan-CBZ	3958	2739	7929	10280	10690	11707	13540
tyrosine-CBZ	3725	3157	13827	22212	24974	39015	45121
UDP-D-glucose	191352	195073	158897	129872	352335	439199	382588
UDP-D-glucuronate	47006	59421	48703	36807	51023	75116	93010
UDP-N-acetyl-glucosamine	36557	40975	31059	48041	71109	87779	76745
UDP-nega	779	450	408	337	607	832	1837
UTP-nega	8449	10645	3947	1921	6763	16586	17787
valine-CBZ	59515	45583	94810	160586	59160	85132	194158
xanthosine	1964	1261	1106	3083	4039	4559	4077

Trimethoprim (4 µg/ml) + 0.3 mM gly + ino + met + thy replicate 2 raw data

Time (min)	0	1	5	15	30	60	120
Optical density	0.450	0.450	0.484	0.518	0.587	0.724	0.998
1,3-diphosphateglycerate	179	363	224	333	943	1308	2209
2,3-dihydroxybenzoate	1404	1398	21259	161192	241806	400092	624207
2,3-Diphosphoglyceric acid	1257	1634	2554	6503	6705	8616	9984
2-Hydroxy-2-methylbutanedioic acid	3095	2253	5189	2028	6166	5688	5688
2-Isopropylmalic acid	128998	100770	101369	70307	119894	129763	143225
2-oxo-4-methylthiobutanoate	2793	3008	2438	2255	2485	5319	4239
3-phosphoglycerate	5082	3151	4942	3499	4800	7500	11975
5-phosphoribosyl 1-pyrophosphate	4961	7086	7818	7913	40706	37544	39618
6-phospho-D-gluconate	14083	9533	6117	5073	5369	8740	13781
acetyl-CoA-nega	2683	5270	2969	5115	5963	4913	8750
acetylphosphate	9631	6127	8729	13645	18218	28925	65868
aconitate	2984	2580	5987	3684	2385	2223	2337
adenosine 5'-phosphosulfate	765	625	655	794	626	1356	1808
ADP-D-glucose	586	100	100	134	100	100	187
ADP-nega	997	2225	1582	2307	1504	1873	3884
a-ketoglutarate	8460	9205	13088	13333	12701	15145	15255
alanine-CBZ	145949	109372	200219	258329	204190	222928	305269
alanine-CBZ-C13N15-IS	532495	410137	380877	338642	346163	352457	318883
AICAR	131	646	3711	11580	23773	33146	42514
arginine-CBZ	4158	5936	6794	3363	7540	8832	11742
Ascorbic acid	146	100	100	9016	16704	16012	27833
asparagine-CBZ	98315	57929	64816	79691	90575	111198	132804
Aspartate-(U-13C/15N)-(neg)	8249	8119	7377	6817	8133	7765	9263
aspartate-CBZ	149365	145450	198672	202189	335580	358573	416895
ATP-nega	18733	24014	24079	42231	22011	32341	47659
carbamoyl-phosphate	239	304	125	100	1359	2515	4250
Citraconic acid	2543	2016	2984	2381	2438	3214	3447
citrate	7918	9854	16277	8319	5724	4415	4383
citrate/isocitrate	62298	87952	153099	83075	65723	47992	52548
citulline-CBZ	13921	11505	11525	17873	17757	18929	20721
CTP/UTP-nega-IS	12696	19571	20784	20912	21352	23297	23516
CTP-nega	7420	7818	9128	5167	7512	12025	16474
dATP-nega	827	1295	1869	3962	1335	2274	3459
dCTP-nega	1122	1878	1599	1987	1180	2523	1859
dGDP	1727	1339	835	2508	2258	2882	3324
D-glucono-δ-lactone-6-phosphate	635	606	313	513	748	578	380
D-glyceraldehyde-3-phosphate	5153	5342	5380	7495	7624	9137	13621
dGTP-nega	18674	24024	24310	42747	20804	36344	52173
dihydroorotate	1050	1134	263	1584	2064	1009	1125
dihydroxy-acetone phosphate	4720	6326	4408	7406	8318	10870	13093
D-sedoheptulose-7-phosphate	7283	7005	5037	3975	5936	7156	8783
dTTP-nega	3553	2231	1982	1768	1295	2771	6083
dUMP-nega	100	2380	18097	34341	28002	27874	24100
fructose-1,6-bisphosphate	39537	55499	49830	58625	51477	60209	71571
fructose-6-phosphate	1475	2418	1138	2150	1999	2727	1318
geranyl-PP	1501	1548	1571	1763	1549	1605	1809
glucose-1-phosphate	908	1826	1199	1280	1044	1412	1269
glucose-6-phosphate	3940	3658	3666	5250	5531	3965	4843
glutamate-CBZ	5009351	4787331	5368858	6576927	6493827	7600819	8029287
glutamine-CBZ	348229	296406	318996	375844	484471	522295	592400
glutathione disulfide-nega	27008	36342	34609	29426	33739	44602	36241

glutathione-nega	46598	51814	52136	57469	79932	94960	148490
glycerate	3733	4741	7296	3729	3636	3901	4507
glycine-CBZ	467445	497446	469067	453036	428002	398191	355062
GTP-nega	9265	11660	15855	20725	18402	21687	27143
hexose-phosphate	15657	13362	10590	16588	15889	14482	20739
histidine-CBZ	7591	8725	8291	7340	8307	6667	9026
homocysteine-MMTS	15114	12944	16789	23068	33787	41991	78282
hypoxanthine	4979	3453	4071	3661	1336	1448	1048
Indoleacrylic acid	2969	2390	1922	3001	2169	2243	3435
leucine/isoleucine-CBZ	36927	34246	57011	45235	36233	40557	48546
lysine-CBZ	161568	132577	206538	185594	229222	279436	424090
malate	43904	42176	63369	54726	78561	79907	81589
Maleic acid	1871	3740	2717	2602	3018	2895	2059
methionine-CBZ	5328656	5330501	4936809	4487037	4537865	4891146	4969040
Methylmalonic acid	39803	39655	292406	44393	44635	35878	36332
NAD+_nega	25401	32213	31932	38288	52769	61496	77710
NADP+_nega	9666	14837	12545	13529	12536	16993	28270
NADPH_nega	2570	4694	4228	6189	4484	7504	8274
N-Carbamoyl-L-aspartate	38704	36437	28637	121354	48769	31529	18642
ornithine-CBZ	17341	12853	11561	18411	17260	24048	31199
orotate	21367	8267	16213	26601	22734	31620	37416
phenylalanine-CBZ	520	100	2553	2036	2313	2598	4477
phenylpyruvate	1033	665	847	2908	3086	5912	13051
phosphoenolpyruvate	611	1446	1679	3500	3340	5427	6108
p-hydroxybenzoate	1152	459	1602	1323	2146	2380	3425
prephenate	190	100	400	1934	2284	3711	7609
proline-CBZ	57153	43920	30502	50056	51095	88842	163675
pyruvate	899	590	1363	4692	7630	7448	11124
quinolinate	619	1083	1483	1938	1270	1368	860
ribose-phosphate	1763	1652	1433	2345	1695	2410	4739
S-adenosyl-L-methionine	343	945	323	100	125	100	821
S-adenosyl-L-methionine MMTS	100	100	247	459	100	277	512
serine-CBZ	27989	10900	4944	5902	8484	7037	7153
shikimate-3-phosphate	1015	460	1089	404	1149	873	386
sn-glycerol-3-phosphate	2186	1593	2564	1776	1693	2736	3577
S-ribosyl-L-homocysteine-nega	796	704	758	572	1374	1695	2679
succinate C12	1121	1047	9653	1345	1314	800	902
threonine-CBZ	74969	41446	56677	71874	68082	82853	108887
threonine-CBZ-C13	10078	7130	6079	5958	5966	5278	5931
trehalose 6-Phosphate	100	223	100	100	172	364	834
trptophan-CBZ	3266	1535	5328	8254	8683	8554	13778
tyrosine-CBZ	2780	2869	12475	25968	27986	36412	50905
UDP-D-glucose	185859	195940	168906	148449	355583	437748	486030
UDP-D-glucuronate	45765	54863	67597	62823	58827	98506	125955
UDP-N-acetyl-glucosamine	39824	45010	34205	55841	67078	81373	93287
UDP-nega	671	765	687	889	1236	673	3322
UTP-nega	13927	15124	18085	17301	29709	46368	59122
valine-CBZ	50327	27918	82899	149885	54692	80879	180166
xanthosine	1261	1423	3148	2775	3291	3937	4199