TABLE 1. *Pyrococcus furiosus* growth rates, maximum cell concentrations, and H_2 yields on various substrates

Growth substrate[a]	Doubling time (min)[b]	Max. cell concn (ml^{-1})	Cell-specific H_2 production rate (fmol $cell^{-1}$ $doubling^{-1}$)[c]	Max. H_2 production rate (mmol l^{-1} h^{-1})
0.5% CF 11 cellulose + tr YE	64	5.2×10^7	36.2 ± 2.7	1.8
0.5% cellobiose + tr YE	93	6.7×10^7	37.0 ± 2.7	1.6
0.5% starch + tr YE	80	1.2×10^8	29.0 ± 1.3	2.6
0.5% maltose + tr YE	85	7.6×10^7	29.5 ± 1.9	1.6
0.5% casein hydrolysate + tr YE	106	1.7×10^7	53.8 ± 9.1	0.5
0.01% tr YE	84	1.8×10^7	27.3 ± 7.8	0.4

[a] tr YE, 0.1% (wt vol^{-1}) yeast extract.

[b] The growth rate on cellulose was significantly higher than rates on cellobiose, starch, maltose, casein hydrolysate, and yeast extract only ($P < 0.05$).

[c] $P < 0.05$ for H_2 production rates on casein hydrolysate compared to rates on CF11 cellulose and cellobiose and for rates on CF11 cellulose and cellobiose compared to rates on starch, maltose, and yeast extract only. Errors represent the 95% confidence interval.