

**Table S8.** Biomass composition of iGD1575b and iGD1575c.<sup>a</sup>

Component	Percent dry mass	Composition - %
DNA	2.8	Guanine - 31.05 Cytosine - 31.05 Adenine - 18.95 Thymine - 18.95
RNA	7.1	Guanine - 28.09 Cytosine - 28.09 Adenine - 21.91 Uracil - 21.91
Protein	49.3	Lysine - 3.20 Alanine - 12.01 Leucine 10.19 Phenylalanine - 3.94 Arginine 7.33 Glutamine - 2.90 Glycine - 8.46 Methionine - 2.44 Valine - 7.58 Proline - 5.03 Tyrosine - 2.29 Aspartate - 5.31 Glutamate - 5.84 Histidine - 2.11 Threonine - 5.15 Cysteine - 0.93 Isoleucine - 5.48 Tryptophan - 1.38 Asparagine - 2.64 Serine - 5.80
Lipid	12.8	PG(36:2) - 7.82 CL(36:2) - 3.11 PE(36:2) - 25.35 PC(36:2) - 59.92 SL(36:2) - 2.00 OL(36:1) - 1.80
PHB	17.6	N/A
Glycogen	0.4	N/A
LPS	3	N/A
Cell wall	2	N/A
LMW Succinoglycan <sup>b</sup>	4	N/A
HMW Succinoglycan <sup>b</sup>	1	N/A
Putrescine	Trace	N/A

Spermidine	Trace	N/A
Vitamins, cofactors, coenzymes, ions, and other	Trace	Polyphosphate Pantothenate Coenzyme A NAD <sup>+</sup> ; NADH NADP <sup>+</sup> ; NADPH FAD <sup>+</sup> , FADH <sub>2</sub> Folate; Tetrahydrofolate; 5,10-Methylenetetrahydrofolate Thiamine diphosphate Riboflavin Biotin Heme A Vitamin B12 coenzyme Undecaprenyl diphosphate Ubiquinone-8 Pyridoxal phosphate Glutathionine reduced Glutathionine oxidized Holo-carboxylase Co <sup>2+</sup> (Cobalt) Mg <sup>+</sup> (Magnesium) Ca <sup>2+</sup> (Calcium) Mn <sup>2+</sup> (Manganese) Fe <sup>3+</sup> (Iron) Fe <sup>2+</sup> (Iron) Zn <sup>2+</sup> (Zinc) K <sup>+</sup> (Potassium) Na <sup>+</sup> (Sodium)

<sup>a</sup> The composition of all components was set as described previously for iGD1575 [1]. The exception are the vitamins, cofactors, coenzymes, and ions that are newly added, and were included at an equal, trace concentration in the biomass.

<sup>b</sup> Succinoglycan was removed from the biomass of iGD1575c.

## REFERENCES

1. diCenzo GC, Checcucci A, Bazzicalupo M, Mengoni A, Viti C, Dziewit L, et al. Metabolic modelling reveals the specialization of secondary replicons for niche adaptation in *Sinorhizobium meliloti*. Nat Commun. 2016;7: 12219. doi:10.1038/ncomms12219