Metabolism Amino acid metabolism Biosynthesis of other secondary metabolites Carbohydrate metabolism 600 -90 -600 -400 • 60 -400 -200 -30 -200 -0 0 Energy metabolism Glycan biosynthesis and metabolism Lipid metabolism 300 -600 -200 -200 -400 -Number of Genes 100 -100 -200 -Metabolism of cofactors and vitamins Metabolism of other amino acids Metabolism of terpenoids and polyketides 800 -200 -100 -600 -150 -75 -400 -100 -50 -200 -50 -25 -0 0 -0 Nucleotide metabolism Overview Xenobiotics biodegradation and metabolism 1000 -40 -400 -750 -30 -300 -500 -200 -20 -250 -10 -100 -0 everything " GS2_only " GS2_only " public_samples -GS1_only our_study " public_samples " GS1_only " GS2_only -GS2 our_study • GS2 public_samples GS1_only everything everything GS2 our_study GS1 GS1 GS1 Core genes Soft core genes Shell genes Cloud genes

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