

Biosynthesis of polyhydroxyalkanoates by recombinant *Ralstonia eutropha* from sucrose

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Polyhydroxyalkanoates (PHAs) have been considered as promising environmentally friendly alternatives of petroleum-based polymers due to their material properties that are similar to those of chemically synthesized plastics. Since the cost effective production of PHAs is one of the most important factors for the commercialization of PHAs, much effort has been devoted to the development of microorganisms able to efficiently utilize cheap carbon sources such as sucrose and glycerol. Sucrose is one of the most abundant and least expensive carbon sources extracted from sugarcane and sugarbeet. Thus, development of microorganisms capable of utilizing sucrose as carbon source can provide cost-competitiveness of fermentation-driven products. Here, we report recombinant *Ralstonia eutropha* strains able to produce PHAs from sucrose as a carbon source and detailed results will be presented in this presentation.