



Production of PHA from *Pseudomonas Plecoglossicida* and its biomedical application

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Abstract

To reduce the amount of plastic waste, world-wide programs for efficient management of utilized plastic materials, such as recycling, have been started PHAs could be completely relied on replacing the conventional plastics as they share similar thermo mechanical properties with the petrochemical based plastics. PHA exhibit high level of biocompatibility and biodegradability, hence they are used for several biomedical applications. PHA extracted from *Pseudomonas plecoglossicida* checked for its ability to attach cancer cells was investigated. Cancer cells showed high affinity of adherence on the PHA sheets used. Contact angle detection have proved that only cancer cells showed the adherence effect and normal cells did not exhibit such adherence property towards the PHA sheets which was further authenticated by contact angle observations. Hence, PHA sheets can be effectively used as a valid target for the contact angle detection of cancer cells.

Keywords

Cancer cells. Contact angle detection. PHB. *Pseudomonas plecoglossicida*.

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