

合成抑制剂研究的试验菌株,编号为 MBI 39-24。

(2) 对 MBI 39-24 菌株的初步鉴定结果为秃裸链霉菌(*Streptomyces calvus*)。

(3) 分离出 4 种具有抑制黑色素生物合成活性的单峰物质。

(4) 确定了抑制效果最好的单峰物质 MBI-3[#], 其对于 B16 鼠黑素瘤细胞中黑色素合成的抑制活性为 15 $\mu\text{g}/\text{mL}$, 细胞毒性与最小抑制浓度的比值为 16.7。

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Primary Studies on Melanin Biosynthesis Inhibitors

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ABSTRACT The *Streptomyces bikiniensis* screening model and the experiment of acute cell toxicity were used to screen melanin biosynthesis inhibitors. The strain of *Streptomyces* sp. number N39-24 (named as MBI 39-24) was chosen as the experimental strain for the research of melanin biosynthesis inhibitor from 1700 actinomycetes. It was identified as *Streptomyces calvus*. Four kinds of material with mono-peak that had the melanin inhibiting bioactivity were separated adopting natural medicine extraction methods. The four kinds of material with mono-peak were tested for inhibitory effect on melanin synthesis in cultured melanin-producing murine B16 melanoma cells. MBI-3[#] was proved to be the most effective through the inhibition comparison and the cell toxicity/inhibition ratio on melanin synthesis. Its inhibitory bioactivity on melanin synthesis in cultured melanin-producing murine B16 melanoma cells was 15 $\mu\text{g}/\text{mL}$. The ratio of cell toxicity and inhibition on melanin synthesis was 16.7.

Key words melanin, melanin biosynthesis inhibitor, actinomycetes, screening



全球软饮料市场更趋向健康化

据统计,世界软饮料市场青睐健康饮品,以往走俏的碳酸型饮料的销售正逐渐下降,原因是发达国家出现的肥胖症及糖尿病使消费者大幅削减含糖型饮料的消费,取而代之的是健康饮品,如水果果汁和优质的含附加物的果汁,后者即所谓的强化型瓶装水或添加矿物质和电解质的“运动型”饮用水。