



具抗肿瘤活性中度嗜盐菌YIM 80186的分离和系统发育分析

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Isolation and hpylogenetic analysis of one moderately halophile YIM 80186 with strong anticancer activity

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- 摘要
- 参考文献
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全文: PDF (1045 KB) HTML (KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 从青海盐碱土壤样品中分离到1株中度嗜盐放线菌YIM 80186,该菌株的代谢产物具有很强的抗肿瘤和抗菌活性.菌株YIM 80186在添加20~100 g/L NaCl的培养基上生长良好,而在未添加NaCl的多数培养基上生长微弱.最高能耐受200 g/L NaCl.气生菌丝和基内菌丝丰富,白色至黄白色.气生菌丝产生直的或弯曲的孢子链,基内菌丝发育良好,断裂.生长pH范围6.0~10.0,最适pH 7.5~8.0.通过对其进行的包括形态、生理生化特性、细胞化学以及基于16S RNA基因序列的系统发育分析等方面的多相分类研究,该菌株具有拟诺卡氏菌属的典型特征,初步鉴定其为拟诺卡氏菌属的1个潜在新种.

关键词: 拟诺卡氏菌属(*Nocardiopsis*) 16S RNA基因 系统发育分析

Abstract: One moderate halophile YIM 80186.The metabolite of the YIM80186 has strong anticancer activity.Strain YIM 80186 grew well on most tested media containing with 20-100g/L NaCl,but it grew weakly without NaCl supplement.The strain YIM 80186 can produce abundant white vegetative hyphae and aerial hyphae.Vegetative hyphae were developed well and fragmented.The aerial mycelium produced straight to flexuous spore chains.The toleration of NaCl is 200g/L.When the pH range is in 6.0-10.0 the hyphae can grow.The optimum pH rarga is in 7.5-8.0.Based on the polyphasic studies,including its morphology,physiological and biochemical characteristics,chemotaxonomy and phylogenetic analysis by using 16S rDNA sequence comparison,YIM 80186 was primarily identified as a new potential species of the genus *Nocardiopsis* genus.

Key words: *Nocardiopsis* 16S RNA gene phylogenetic analysis

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