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# 细胞连续亲和-HPLC测定8种蟾蜍甾烯与MGC-803细胞亲和量及抗肿瘤活性相关分析

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| 作者中文名 | 作者英文名 | 单位中文名 | 单位英文名 | E-Mail |
|---|---|---|---|---|
| 蒋洁君 | JIANG Jiejun | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 尤奋强 | YOU Fenqiang | 南京中医药大学 昆山附属医院, 江苏 昆山 251300 | Affiliated Hospital, Nanjing University of Chinese Medicine, Kunshan 215300, China | |
| 马宏跃 | MA Hongyue | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | hongyuema@126.com |
| 周婧 | ZHONG Jing | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 张军峰 | ZHANG Junfeng | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 詹臻 | ZHAN Zhen | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 唐于平 | TANG Yuping | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 段金廒 | DUAN Jin'ao | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |
| 丁安伟 | DING Anwei | 南京中医药大学 江苏省方剂研究重点实验室, 江苏 南京 210046 | Jiangsu Key Laboratory for Traditional Chinese Medicine Formulae Research, Nanjing University of Traditional Chinese Medicine, Nanjing 210046, China | |


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中文摘要:目的: 采用细胞连续亲和研究蟾蜍甾烯(Bu)与肿瘤细胞的生物亲和作用,分析其与抗肿瘤活性的相关性。 方法 :将蟾酥氯仿提取物与胃癌细胞MGC-803混合培养,高效液相色谱测定上清液和细胞内8种Bu的含量,计算亲和率。 结果 :亲和后细胞上清液中Bu总减少率、细胞内游离Bu的含量百分率和两者差值(与细胞裂解物的亲和率)、抑制MGC-803活性($1/IC_{50}$)相关系数$r$分别是0.82($P$<0.05),-0.04,0.83($P$<0.05)。 结论 :8种蟾蜍甾烯与MGC-803发生不同程度亲和。其与肿瘤细胞或细胞裂解物的亲和率与抗肿瘤活性有显著相关性。

中文关键词:蟾蜍甾烯 MGC-803 细胞连续亲和 高效液相色谱

## Cell continuous extraction-HPLC determination biological affinity of 8 bufadienolides on MGC-803 cells and their correlation with anti-tumor activities

**Abstract:**Objective : To study the bioaffinity between 8 bufadienolides(Bu) and tumor cells and analyze the correlation between the bioaffinity and the anti-tumor activities of Bu. Method : Mix and cultivate the chloroform extract of Chansu and MGC-803. Measure the content of 8 Bu in supernatant and cells using HPLC and calculate their affinity rate. Result : The coefficient correlation between the decrease of Bu in cell supernatant after affinity and its MGC-803 restrictive activities, and between the cotent percentage of the free Bu in free cells with its MGC-803 restrictive activities, and between the difference between the decrease and the percentage and its MGC-803 restrictive activities is $r$=0. 82 ($P$<0. 05),$r$=-0. 04 and $r$=0. 83($P$<0. 05) respectively. Conclusion : Eight Bu have different levels of affinity with MGC-803 which correlate with their anti-tumor activities.

**keywords:**bufadienolides MGC-803 cells cell affinity HPLC

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