

园艺一研究报告

人参中ACE抑制蛋白的提取

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摘要:

从人参粉中提取纯化人参蛋白,以检测人参蛋白对血管紧张素转换酶(ACE)的抑制活性。将人参粉加水(pH 9.0)搅拌,3000 r/min离心20 min。用连续的色谱柱分离: D101大孔树脂分离色谱,离子交换色谱,凝胶过滤色谱。以体外ACE抑制率为指标确定提取的人参蛋白具有抑制ACE的作用。结果表明:人参蛋白对ACE酶具有很高的抑制效果,通过连续的色谱分离方法可将ACE抑制蛋白分离,得到具有较高抑制率的ACE抑制蛋白,该抑制蛋白的抑制率可达92.5%。

关键词: 活性蛋白

Extraction of Angiotensin I-converting Enzyme Inhibitory Protein from Ginseng

Abstract:

The ginseng protein was extracted from ginseng powder, and the inhibitory activity of angiotensin I-converting enzyme (ACE) was detected. Ginseng powder was prepared by stirring in water (pH 9.0), followed by centrifugation at 3000 r/m for 20 min. An ACE inhibitor was purified by using consecutive chromatographic methods, including: D101 macroporous resin chromatography, ion-exchange chromatography, and gel filtration chromatography. The inhibitory activity of ACE was determined as ACE inhibitory activity in vitro of ginseng protein. The ginseng protein had inhibitory activity for ACE, the ACE inhibitor could be extracted by using consecutive chromatographic methods, and the ACE inhibitory ratio could achieve 92.5%.

Keywords: bioactive peptide

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