

论文

SPAP2基因的克隆、融合表达及分离纯化

胡鑫¹, 张小平², 王绍峰¹, 焦明¹, 闫新颖¹, 付学奇¹

1. 吉林大学生命科学学院, Edmond H. Fischer细胞信号传导实验室, 长春 130023;
2. 吉林大学中日联谊医院, 长春 130031

摘要:

本文构建的表达载体pGex-2T-SPAP2CT在大肠杆菌中表达出可溶性蛋白, 其分子量为46 000, 经纯化后得到产率为10%、纯度大于90%的GST-SPAP2CT蛋白。

关键词: [SPAP2基因; 克隆; 融合表达zz'\)](#)" href="#"> [SPAP2基因; 克隆; 融合表达](#)

Cloning, Fusion Expression and Purification of SPAP2 Domain Gene

HU Xin¹, ZHANG Xiao-Ping², WANG Shao-Feng¹, JIAO Ming¹, YAN Xin-Ying¹, FU Xue-Qi^{1*}

1. College of Life Sciences, Edmond H. Fischer Signal Transduction Laboratory, Jilin University, Changchun 130023, China;
2. China-Japan Union Hospital, Jilin University, Changchun 130031, China

Abstract:

SPAP2, a transmembrane protein, is an Ig family receptor containing both ITIMs (immunoreceptor tyrosine-based inhibition motifs) and ITAMs (immunoreceptor tyrosine-based activation motifs). The extracellular portion of SPAP2 contains six immunoglobulin-like domains and its intracellular segment has two ITAMs and two ITIMs. Sequence alignment with the genomic database reveals that the SPAP2 gene contains 16 exons and is localized at chromosome 1q21. SPAP2 is consisted of 734 amino acids, and the intercellular portion of SPAP2 contains 137 amino acids. Tyrosine-phosphorylated SPAP2 is specifically associated with SH2 domain-containing tyrosine kinases and SH2 domain-containing tyrosine phosphatases, which lead to the initiation of signal transduction. SPAP2CT gene was amplified by PCR with SPAP2 full-length DNA as the template and cloned to the pBluescript II KS vector. pGex-2T-SPAP2CT, the expression vector of dissoluble fusion protein, was constructed and transferred into E.coli of DE3-plysS. The fusion protein GST-SPAP2CT was expressed efficiently and purified by FFQ ion exchange chromatography and GSH affinity chromatography. The result indicates that we have constructed steady expression vector pGex-2T-SPAP2CT, which was expressed in E.coli. The molecular weight of the dissoluble fusion protein is 46 000, the productivity of GST-SPAP2CT protein is 10% and the purity is over 90% after the purification.

扩展功能

本文信息

Supporting info

PDF (570KB)

[HTML全文]

([\\${article.html_WenJianDaXiao} KB](#))

参考文献[PDF]

参考文献

服务与反馈

把本文推荐给朋友 [SPAP2基因; 克隆; 融合表达](#)

”几篇好文章, 特向您推荐。请点击下面的网址: "

[name=neirong>](#)

加入我的书架

加入引用管理器

引用本文

Email Alert

文章反馈

浏览反馈信息

本文关键词相关文章

[SPAP2基因; 克隆; 融合表达zz'\)](#)" href="#">[SPAP2基因; 克隆; 融合表达](#)

本文作者相关文章

▶ 胡鑫
▶ 张小平
▶ 王绍峰
▶ 焦明
▶ 闫新颖
▶ 付学奇
▶ 胡鑫
▶ 张小平
▶ 王绍峰
▶ 焦明
▶ 闫新颖
▶ 付学奇

PubMed

Article by
Article by
Article by
Article by
Article by
Article by
Article by

Keywords: SPAP2 gene; Clone; Fusion expression

收稿日期 1900-01-01 修回日期 1900-01-01 网络版发布日期

DOI:

基金项目:

通讯作者: 付学奇

作者简介:

参考文献:

胡鑫,张小平,王绍峰,焦明,闫新颖,付学奇 .SPAP2基因的克隆、融合表达及分离纯化.高等学校化学学报 ,2006,27(5): 891-893

本刊中的类似文章

文章评论

序号	时间	反馈人	邮箱	标题	内容
					META http-equiv Type content="1 charset=unic Appreciation for star hee