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论文

串联亲和纯化技术筛选hCLP46 的相互作用蛋白

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摘要:

hCLP46(human CAP10-like protein46)是从MDS-AML患者的CD34$^+$干细胞cDNA文库中筛选出的基因.我们利用串联亲和纯化技术来筛选与hCLP46有相互作用的蛋白.通过体内交联-甘氨酸洗脱策略,检测到7条有差异的蛋白带,经液相色谱-质谱联用鉴定,得到了CNX和PDI等一系列内质网伴侣蛋白.所以hCLP46可能是一个糖蛋白,其成熟过程利用了BiP/Grp94 和CNX/CRT 2套伴侣蛋白系统.

关键词: 交联剂 串联亲和层析 骨髓增生异常综合症 hCLP46蛋白

Screening proteins interacting with hCLP46 using tandem affinity purification

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Abstract:

hCLP46 (human CAP10-like protein46), a novel gene, has been screened out from the cDNA library of MDS-AML Patient's CD34$^+$ stem cell. For to further studying the biological characteristics of this gene tandem affinity purification (TAP) has been used to isolate proteins which specifically interact with hCLP46, and seven specific protein bands were detected. By using liquid chromatography-mass spectrometry and protein database searching, a series of endoplasmic reticulum chaperones were identified. Two major ER chaperone systems, the BiP/Grp94 and the calnexin (CNX)/ calreticulin (CRT) systems, are important in the maturation of hCLP46.

Keywords: crosslinker tandem affinity purification(TAP) MDS hCLP46

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