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论文

DP-305423转基因大豆PCR检测方法研究

吕智超[1,2], 李飞武[2], 周宁[1,2], 闫伟[2], 王丕武[1], 张明[2]

1.吉林农业大学生命科学学院, 长春 130118; 2.吉林省农业科学院, 长春 130033

摘要:

根据DP-305423外源插入片段与植物基因组序列设计特异性引物,以lectin基因(118 bp)作为内参照基因,筛选最佳引物并对反应程序和反应体系进行优化,最终建立转基因大豆DP-305423转化体特异性定性PCR检测方法。对该方法进行了特异性、灵敏度、稳定性和重复性测试。结果表明:该方法能够特异性检测出DP-305423大豆;DP-305423转基因大豆及其受体按质量比进行混合,检测其灵敏度达到0 05%,约为20个起始模板拷贝;以DP-305423大豆DNA质量分数为1.00%、0.10%、0.05%的样品为模板,其稳定性好、重复性高,假阴性率为0。本试验设计的方法适用于DP-305423转基因大豆特异性定性PCR检测。

关键词: DP-305423转基因大豆 定性PCR 检测方法

Establishment of an EventSpecific Qualitative PCR Method for Detecting DP-305423 Transgenic Soybean

Lv Zhi-chao[1,2], LI Fei-wu[2], ZHOU Ning[1,2],YAN Wei[2], WANG Pi-wu[1], ZHANG Ming[2]

1.College of Life Science, Jilin Agricultural University, Changchun 130118| China; 2.Jilin Academy of Agricultural Sciences, Changchun 130033, China

Abstract:

According to DP-305423 exogenous insert sequences connection with theplant genome sequences, the lectin gene was chosen as the reference gene,the best specific primers were designed, the response procedures and response system were optimized, and finally an eventspecific qualitative PCR method for detecting DP-305423 transgenic soybean was established. Specificity, sensitivity, stability and repeatability of this method were tested. The results showed that the method can specifically detect soybean DP-305423;DP-305423 soybean and its receptor were mixed by weight ratio,detection sensitivity of the method was up to 0.05%,the number of DNA about 20 copies; With the DP-305423 soybean DNA samples of1.00%, 0.10%, 0.05% concentration as templates, stability and repeatability testing was conducted, false negative rate was 0. The results showed that themethod is suitable for detecting transgenic soybean DP-305423-specific qualitative PCR.

Keywords: DP-305423 transgenic soybean eventspecific PCR detection method

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通讯作者:

作者简介: 吕智超,女,在读硕士,研究方向:重要农艺性状基因的分离功能鉴定及品种改良。

作者Email:

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