Biotechnology and Healthcare

R&D Endorsement

Title

Detection molecules, kits and methods for predicting orchid fragrance production

Abstract	This document discloses a molecular marker and method for identifying the monoterpenoid characteristic of Phalaenopsis. It includes the method of using the sequence of the key enzyme upstream promoter in the moth orchid monoterpene synthesis pathway to design primers, perform polymerase chain reaction, and analyze the polymorphism of the polymerase chain reaction product to establish the molecular marker. It also includes a method for identifying the monoterpene traits of Phalaenopsis using the molecular marker.
Benefits	None of the existing technologies uses molecular markers used to detect the fragrance traits of Phalaenopsis. Phalaenopsis aroma traits can only be detected after flowering, and this technology can be used as an evaluation basis for early detection of the presence or absence of Phalaenopsis monoterpenoids. Thereby reducing the cost of the industry and reducing waste generation.
Industry Categories	It can be applied in the Phalaenopsis industry to evaluate the presence or absence of monoterpene traits in the early stage of plant cultivation.
Keywords	Floral, orchid, molecular marker, monoterpenes, phalaenopsis, promoter
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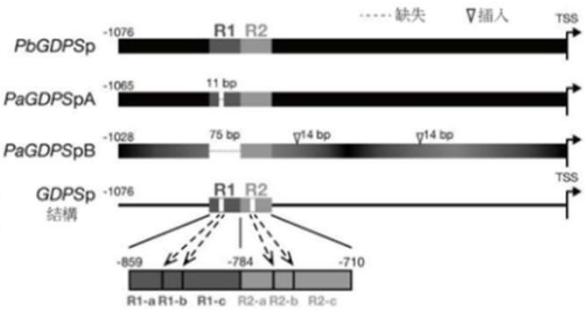

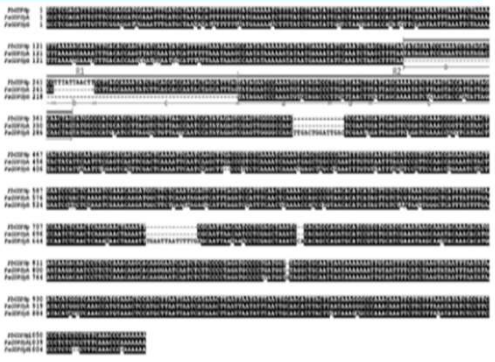

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