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Short Communication

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Gene Editing via Integrase Enzyme

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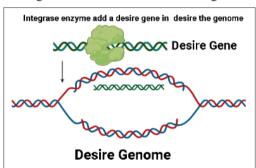
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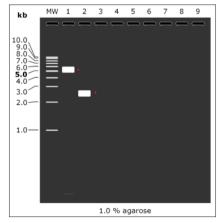
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Targeted integrase enzyme is a most powerful tool for mediating genome alteration with high precision. The gene of the interest is directly catalyze nucleophilic attack of the 3 prime hydroxyl group at the end of processed DNA on a pair of phosphodiester bond in the targeted DNA or genome of the interest. Integrase gene editing method contain two parts gene of the interest with integrase enzyme and desire genome. The integrase enzyme is start integration the gene of the interest into the desire genome or DNA.



Results via Gel electrophoresis

In order to check that whether gene of interest is integrated or not we can perform a gel electrophoresis. The gel contain a two band A and B.A band is a vector of human insulin vector which can show the negative control and B band is a vector of human insulin but the gene have some sequence mutation . We can add a gene of the stranded human insulin by using integrase enzyme and gene can be precisely add to the B band that why B band is in 3.0 and A band is 6.0 which mean that A band is high molecular weight than the B band and a Marker must be 1kb and agarose should be 1% [1-9].



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