

Use of Symmetric Internal Loops for Molecular Pattern Classification

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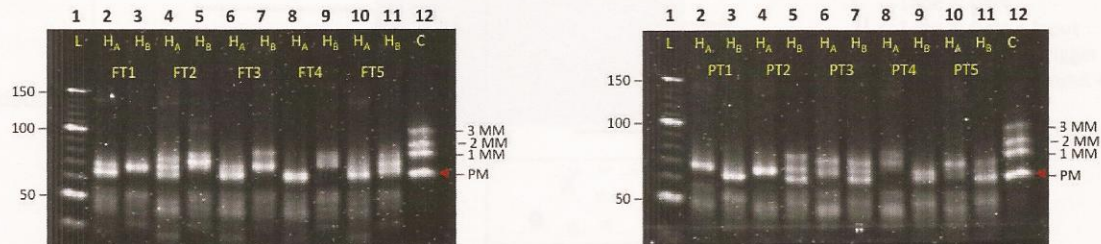
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We present an *in vitro* molecular pattern classification model using the symmetric internal loops of DNA. When two single stranded DNA of the same size undergo the hybridization process, mismatch hybridizations form the symmetric internal loops of DNA[1]. We found that the internal loops of dsDNA can be used to measure the differences in the extent of mismatches present for each instance and thus, can be used to train DNA molecules[2]. The molecular pattern classifier was trained by sentences from TV shows 'Friends' and 'Prison Break'. We used a total of 20 sentences chosen from the TV shows for the training experiments. The given test questions chosen from the scripts were not used in the training process. We experimentally demonstrate that the molecules learned from the given sentences, recognize and classify the given test sentences. As a result, all the test sentences were classified correctly into their corresponding classes.



Reference

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