

رتبه سوم ایرانی مقیم خارج
Third Winner - Iranian Researcher Resident Abroad



Project Title:

Pyrosequencing; A Tool for Sequence Based DNA Analysis

عنوان طرح:
پایروسکانس: ابزاری برای تحلیل تسلسلی DNA

Researcher:

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محقق:
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Country of Residence:

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کشور مقیم:
آمریکا

University:

Stanford Genome Technology Centre

دانشگاه:
مرکز فناوری ژنوم استنفورد

Abstract:

The inventor has presented a new approach for DNA sequencing with no need for electrophoresis or labeled primers. The sequencing reactions are monitored in real time. Single strand DNA could be sequenced using pyrosequencing, which represents a simple and robust alternative to conventional methods. This has provided inexpensive tools enabling low to high throughput genetic analysis. This technology has widely been used for different applications most notably:

Analysis of single nucleotide polymorphisms, EST sequencing, Methylation analysis, HLA typing, gene re-sequencing and Microbial typing. The chip-based pyrosequencing is also being developed. He has contributed to more than 28 papers and 8 patents applications.