

Video Article

Rapid Genotyping of Mouse Tissue Using Sigma's Extract-N-Amp Tissue PCR Kit

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Abstract

Genomic detection of DNA via PCR amplification and detection on an electrophoretic gel is a standard way that the genotype of a tissue sample is determined. Conventional preparation of tissues for PCR-ready DNA often take several hours to days, depending on the tissue sample. The genotype of the sample may thus be delayed for several days, which is not an option for many different types of experiments. Here we demonstrate the complete genotyping of a mouse tail sample, including tissue digestion and PCR readout, in one and a half hours using Sigma's SYBR Green Extract-N-Amp Tissue PCR Kit. First, we demonstrate the fifteen-minute extraction of DNA from the tissue sample. Then, we demonstrate the real time read-out of the PCR amplification of the sample, which allows for the identification of a positive sample as it is being amplified. Together, the rapid extraction and real-time readout allow for a prompt identification of genotype of a variety different types of tissues through the reliable method of PCR.

Video Link

The video component of this article can be found at <https://www.jove.com/video/636/>

Protocol

Please [click here](#) to view the protocol.

Disclosures

The authors have nothing to disclose.