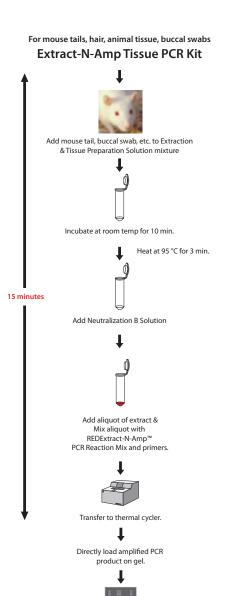
Genomics

Your shortcut for PCR – DNA Extraction from Tissue



Extract-N-Amp[™] Tissue PCR Kits

From tissue or cells to PCR in 15 minutes

Extract-N-Amp Tissue PCR Kits – provide all the reagents necessary to rapidly extract DNA from a wide variety of cells and tissues and amplify targets of interest by PCR or Quantitative PCR. A novel extraction method eliminates the need for long enzymatic digestions or homogenization. The kit also includes a specially formulated hot-start PCR ReadyMix for amplification directly from the extract.

Features & Benefits

- 15 minute extraction of genomic DNA for PCR
- Hot-start antibody for highly specific PCR amplification of genomic DNA
- Perfect for quick genomic DNA isolation for genotyping
- Protocols available for mouse tails, hair, animal tissue, saliva, and buccal swabs
- Stable extract can be used repeatedly for multiple downstream applications including Quantitative PCR
- Easily automatable procedure

For additional technical information on Extract-N-Amp Tissue, please visit **sigma.com/nap**

World Headquarters

3050 Spruce St., St. Louis, MO 63103 (314) 771-5765 sigma-aldrich.com

Order/Customer Service

(800) 325-3010 Fax (800) 325-5052

Technical Service

(800) 325-5832 sigma-aldrich.com/techservice

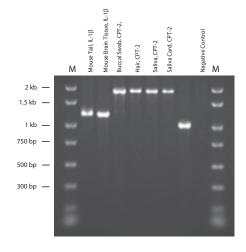
Development/Bulk Manufacturing Inquiries

(800) 244-1173

Safety-related Information

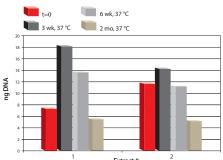
sigma-aldrich.com/safetycenter

Rapid Genomic DNA Extraction from Tissue



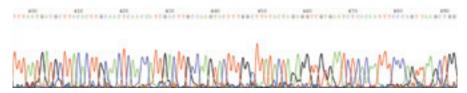
PCR Analysis of Genomic DNA Extracted from Tissue Using Sigma's Extract-N-Amp™ Tissue PCR Kit

PCR analysis of genomic DNA extracted from various samples using Sigma's Extract-N-Amp Tissue PCR Kit. Genomic DNA was extracted from the samples using the appropriate protocol as described in the Extract-N-Amp Tissue Technical Bulletin. In all cases, the extraction procedure was completed in less then 15 minutes, then DNA was amplified using hot start PCR ReadyMix™. The products generated are 1181 bp for the Interleukin-1β gene in mouse and 1820 bp for the Carditine palmitoyltransferase II in human. Markers are PCR Marker (Cat. No. P9577)Stability of Blood Extracts at 37 °C



Stability of Mouse-Tail Extracts at 37 °C

Mouse-tail samples were extracted according to the procedure in the Technical Bulletin for the Extract-N-Amp Tissue PCR Kit. 4µl aliquots were analyzed immediately by quantitative PCR with SYBR® Green detection on an ABI Prism® 7700. DNA standards for quantitative PCR were purified DNA prepared from mouse tails using the GenElute™ Mammalian Genomic DNA Kit (Cat. No. G1N70) and stored as single use aliquots at −20 °C. The mouse-tail extracts were stored at 37 °C (accelerated storage). Quantitative PCR was repeated after 3 weeks, 6 weeks, and 2 months from extracts at 37 °C. Results for storage at 37 °C are shown. These results suggest that extracts will be stable for at least 6 months at the recommended storage temperature of 4 °C.



Sequence determination for 1181 bp Interleukin-1β mouse-tail PCR product.

The DNA extraction and PCR were performed using Sigma's Extract-N-Amp Tissue PCR Kit. The PCR product was purified with teh GenElute PCR Clean-up Kit (Cat. No. NA1020). The product was sequenced directly using BigDye® terminator v 3.1 chemistry. Sequencing reactions were analyzed on an ABI 3730xl.

SYBR is a registered trademark of Molecular Probes, Inc. BigDye is a registered trademark of ABI. Prism is a registered trademark of Applera Corp. Extract-N-Amp, GenElute and REDExtract-N-Amp are trademarks of Sigma-Aldrich Biotechnology IP and Sigma-Aldrich Go. Sigma and Sigma-Aldrich are registered trademarks of Sigma-Aldrich Biotechnology IP and Sigma-Aldrich Co.

Ordering Information			
Cat. No.	Product Description	Extractions	Amplifications
XNAT	RedExtract-N-Amp™ Tissue PCR Kit	100	100
XNATR	RedExtract-N-Amp Tissue PCR Kit	1000	1000
XNAT2	Extract-N-Amp Tissue PCR Kit	100	100
XNAT2R	Extract-N-Amp Tissue PCR Kit	1000	1000
XNATSG	SYBR® Green Extract-N-Amp Tissue PCR Kit	10	10
XNATG	SYBR Green Extract-N-Amp Tissue PCR Kit	100	100
XNATRG	SYBR Green Extract-N-Amp Tissue PCR Kit	1000	1000

