

# ISOLATE II Genomic DNA Kit

A Precious Find

- Efficient: streamlined protocol for consistent recovery of genomic DNA in as little as 20 minutes
- High-performance: extraction of high-purity genomic DNA, ideal for use in all downstream applications
- High-yield: efficient sample lysis and column-binding for high-yield recovery of genomic DNA from limiting amounts of sample
- Flexible: reliable extraction of genomic DNA from a broad range of human, animal and microbial samples.

ISOLATE II Genomic DNA Kit provides a simple, efficient column-based method for the isolation of genomic DNA from a wide variety of materials, without the need for hazardous reagents such as phenol.

By combining Proteinase K lysis with the speed and convenience of silica membrane purification, ISOLATE II Genomic DNA Kit provides a fast method for the purification of high-quality genomic DNA from a variety of starting materials (Fig. 1).

ISOLATE II Genomic DNA Kit has been designed to deliver optimal performance in qPCR with SensiFAST™ SYBR® and Probe Kits, or in end-point PCR with MyTaq™ DNA Polymerase.

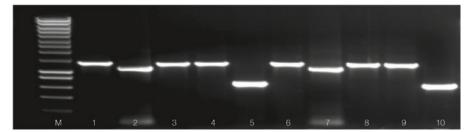


Fig 1. PCR analysis of genomic DNA extracted from a range of different species

Genomic DNA was isolated in duplicate from 3T3 cells, HeLa cells, mouse lung, mouse tail and E. coll, using the ISOLATE II Genomic DNA Kit (lanes 1-5 and 6-10 respectively, HyperLadder 1kb (M)) and then used to amplify a fragment of the Rn18s gene (16s RNA gene for the E.coll) using MyTaq DNA Polymerase. The results illustrate the consistency in the quality of genomic DNA that has been purified across a broad range of species.

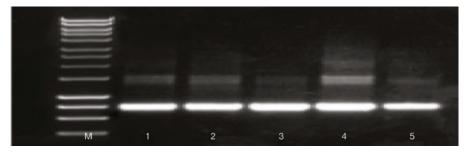


Fig 2. PCR analysis of genomic DNA extracted from different species of gorilla

Genomic DNA was isolated from hair samples of eastern lowland gorilla (G. beringei graueri), western gorilla (G. gorilla), northern plains gray langur (S. entellus), white-headed langur (T. poliocephalus) (museum sample) and red-shanked douc (P. nemaeus) (lanes 1-5 respectively, HyperLadder 1kb (M)). The genomic DNA was then used to PCR a 620 bp fragment of the B-actin gene using MyTaq Mix $^{\mathbb{N}}$ , to illustrate the quality, purity and yield of the DNA extracted across a broad range of samples.



#### **APPLICATIONS**

- qPCR
- End-point PCR
- Southern, dot and slot blotting
- Genotyping
- Restriction digestion
- Next generation sequencing
- Bisulfite conversion/methylation analysis

### **FLEXIBLE**

The product manual contains protocols for purifying DNA from mouse or rat tails, bacteria, yeast, dried blood spots, genomic/viral DNA from blood, hair follicles (Fig. 2), paraffin-embedded tissue (FFPE), insects, dental swabs, buccal swabs, stool viruses (e.g. CMV), *Mycobacterium tuberculosis* or *Legionella pneumophila* in sputum or bronchoalveolar lavage, EHEC bacteria in food, bacterial DNA (e.g. *Chlamydia trachomatis*) from cultures, biological fluids or clinical specimens, bacterial DNA (e.g. *Borrelia burgordferi*) and viral DNA (e.g. CMV) from urine.



I used the ISOLATE II Genomic DNA Kit to extract genomic DNA from mice tails for genotyping. The kit comes with very clear, user-friendly instructions and provides efficient, reliable and cost effective isolation of DNA. Overall a great kit for genomic DNA extraction and downstream analysis.

WILSON WONG, UNIVERSITY OF SYDNEY, CAMPERDOWN, AUSTRALIA

# **Ordering Information**

Product	Pack Size	Cat. #
ISOLATE II Genomic DNA Kit	10 Preps	BIO-52065
	50 Preps	BIO-52066
	250 Preps	BIO-52067

For related products such as our end-point PCR and qPCR kits please visit www.bioline.com

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