Top-Bio s.r.o.

Tel: +420 603 476 934
E-mail: top-bio@top-bio.cz
www.top-bio.com

PCR Genotyping Kit

(Catalogue number D215, D216, D217) rev. 04/2025

Description

PCR Genotyping Kit is designed for rapid extraction of DNA from various tissues and cells and for PCR genotyping of the extracted DNA. Kit includes **DEP-25 DNA extraction Kit** and **Combi PPP Master Mix** for Hot-Start PCR.

DEP-25 (**D**NA **E**xtraction for **P**CR under **25** min**)** is a two-component reagent set for extraction of genomic DNA of various origin for PCR analysis. Extraction with DEP-25 is performed rapidly and is carried out in a single tube, mitigating chances for sample cross-contamination. The kit is amenable to high throughput-based screening and is suitable to several downstream applications such as identification of genotypes, DNA fingerprinting, and cell identity/contamination analysis. DNA can be prepared in 25 min or less and does not require lengthy enzymatic digestion, expensive column purification or phenol/chloroform extraction **(Fig. 1)**.

Combi PPP Master Mix is dedicated for simplified hot-start PCR. It contains Taq DNA polymerase, deoxyribonucleotides, reaction buffer components, additives and monoclonal antibody anti-Taq for hot-start PCR. Samples for PCR are prepared by simple mixing 2x concentrated Combi PPP Master Mix with target-specific oligonucleotide primers, template DNA and water. Additives and the dye present in Combi PPP Master Mix allow direct loading of the PCR-amplified samples into the well in the gel without adding loading buffer. Combi PPP master mix is compatible with template DNA extracted with DEP-25 **(Fig. 2).**

Detailed description of the kit components, technical data, storage conditions and protocols are described in leaflets to DEP-25 – DNA Extraction kit and Combi PPP Master Mix. Individual components of the kit can also be ordered separately.

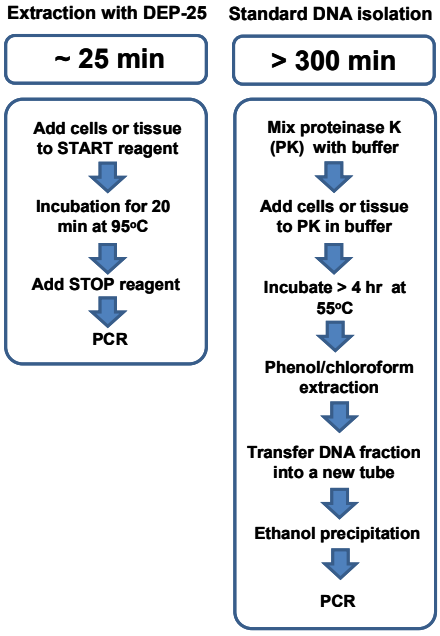

Fig. 1. Schematic presentation of two methods used for preparation of genomic DNA in quality suitable for PCR analysis. Extraction with DEP-25 consists of 3 simple steps and lasts ~25 minutes. This procedure is shorter, simpler and cheaper when compared to DNA isolation using standard DNA isolation method based on proteinase K digestion and phenol/chloroform extraction.

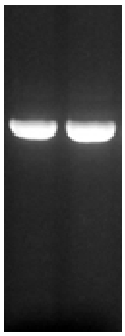

Fig. 2. PCR amplification of genomic DNA extracted with DEP-25 (**1**) or isolated by standard DNA isolation method (**2**). For PCR with Combi PPP Master Mix, oligonucleotide primers specific for 864 bps fragment were used [Nucl. Acids Res., 36 (15):e93, 2008]. PCR amplicons were size-fractionated by agarose gel and stained with ethidium bromide. Only fragments of the expected size were visible.

Kat. č.	Název výrobku a specifikace	Množství
D215	PCR Genotyping Kit (DEP-25 + Combi PPP Master Mix)	**40** assays
D216	PCR Genotyping Kit (DEP-25 + Combi PPP Master Mix)	**200** assays
D217	PCR Genotyping Kit (DEP-25 + Combi PPP Master Mix)	**1000** assays

**For PCR assays, 25 µl each.*

Technical Data

Components and Packaging

- **DEP-25 DNA Extraction Kit** is supplied in bottles containing either 2x 8 ml (Cat. No. D225), 2x 30 ml (Cat. No. D226) or 2x 120 ml (D227) of START-Blue and STOP reagents.
- **Combi PPP Master Mix** is supplied in tubes: 500 µl (Cat. No. C208), 5x 500µl (Cat. No. C209), 25x 500µl (Cat. No. C210) + PCR Ultra H_2O.

Storage

- **DEP-25 DNA Extraction Kit** at temperature 2 - 8°C. For short time (days) at temperature up to 35°C. This allows transport without cooling (nature friendly).
- **Combi PPP Master Mix** at temperature -20°C ± 5°C. For short time (days) at temperature up to 35°C. This allows transport without cooling (nature friendly).

Purity and Quality Control

- Each batch of PCR Genotyping Kit is tested for its ability to extract genomic DNA, which can be amplified by PCR. The results are verified by electrophoresis in agarose gel in the presence of ethidium bromide; only DNA band of the expected size is present **(Fig. 2)**.