

Cobo Technologies

CoboXtract™ – Quick DNA Extraction Solution 2.0, 50 ml

Datasheet
Cat. No.: C20201

Kit Contents

Name	Cat. No.	Size	Extractions
CoboXtract™ – Quick DNA Extraction Solution 2.0	C20201	50 ml	100-1000

Key Features

- Quick extraction of PCR-ready DNA from most cell/tissue types.
- Inexpensive, one-tube protocol for easy handling.
- Used for efficient extraction of DNA from:
 - Tissue-culture cells
 - Buccal cells
 - Zebrafish organs and scales
 - Mouse tail snips
 - Hair follicles and Quill-end cells of feathers.
 - Plants (validated on Nettle and Ivy)
- Fragment Analysis Grade (proven DNA extraction solution for fragment analysis applications, like the innovative IDAA™ method).
- PCR-Ready DNA within 6-8 minutes.
- No use of spin-columns or centrifugation.
- Ideal for high-throughput setup.
- Non-toxic solution.

Product Info

CoboXtract™ - Quick DNA Extraction Solution 2.0 provides a fast, simple, and inexpensive method for easy extraction of genomic DNA from various mammalian tissues e.g. mouse tails, ear snips, liver, kidney, lung, zebrafish organs and saliva for PCR amplification - all without the use of toxic chemicals or spin columns. CoboXtract™ can also be used to extract genomic DNA from plants.

The one-step lysis is performed in either a thermocycler or heating block and is divided into two simple heating steps. The extracted DNA is ready for PCR without further handling such as vortex, centrifugation or dilutions.

The procedure is easily scaled to process hundreds of samples in multiwell plates, using robotic automation systems.

The extracted DNA is suitable for PCR-based analysis, such as: genomic, transgenic, or viral DNA screening in animals; genetic or environmental research and screening in humans and other organisms; and CRISPR/Cas9 applications (IDAA™, T7E1, Surveyor, NGS).

CoboXtract is provided in a 50 mL volume, sufficient for 100-1000 extractions.

Research Use Only.

Recommended Storage and Stability

Store at -20°C in a freezer without a defrost cycle. Recommend to aliquot the 50 ml in 10x5ml tubes to minimize freeze/thaw cycles of the working solution. Thawed CoboXtract™ can be stored at 4°C for 1 month.

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Protocol

1. Label the appropriate number of tubes containing 0.5 mL* of CoboXtract Solution.
2. Place one sample in each tube, for example:
 - 10³-10⁴ counted cells
 - a 0.5–1 cm region of a single plucked human hair with follicle
 - a 0.5–1 cm section of a mouse tail snip, finely diced using a fresh blade
 - a 0.5-1 cm zebrafish fin-tip
 - one single e. coli colony picked from a plate
 - a 0.5–1 cm quill-end of a breast feather that was plucked and stored at 4°C
 - 10-50 mg plant material
3. Mix by vortexing for 15 seconds.
4. Transfer the tube to a heat block at 65°C and incubate for 6 minutes (15 minutes for fingernails).
5. Mix by vortexing for 15 seconds.
6. Transfer the tube to a heat block at 98°C and incubate for 2 minutes.
7. Store the DNA at –20°C for up to 1 week, or at –70°C for longer periods.
8. Use 5 µL or less of the extracted DNA for each PCR amplification.

*For some applications it will be possible to use down to 50 µl CoboXtract solution per sample.

Troubleshooting

If the PCR is unsuccessful using undiluted extract, try using a 1:10 dilution of the extract as a template. While it may be counterintuitive to use less starting DNA material, better results are sometimes achieved by reducing the amount of potential PCR inhibitors in the reaction.