



## Direct Extraction Buffer

Buffer for fast extraction of DNA and RNA from sample material

Cat. No.	Amount
PCR-534-20ML	20 ml
PCR-534-100ML	5 x 20 ml

### For general laboratory use.

**Shipping:** shipped at ambient temperature

**Storage Conditions:** store at 4°C or -20°C

**Shelf Life:** 12 months

**Form:** liquid

**Concentration:** 10 x

### Description:

Direct Extraction Buffer allows an easy and fast extraction of DNA and RNA directly from blood, swabs and animal- or plant tissue. The buffer is optimized for use in combination with Direct PCR or RT-PCR master mixes like qPCR ProbesMaster (PCR-396) or SCRIPT Direct RT-qPCR ProbesMaster (PCR-528).

The mix allows DNA and RNA preparation within 3-5 minutes and with a minimum of pipetting steps. It is especially recommended for:

- Direct detection of viral or bacterial DNA in nasal or throat swabs
- Direct PCR from blood samples
- Direct amplification of target DNA from various tissue samples
- Point-of-Care diagnostics

The preparation process can be easily automatized.

### Content:

#### Direct Extraction Buffer

10 x conc.

### Sample preparation

#### a) Blood Samples / Liquid Samples

- Dilute 10x Extraction Buffer to 1x concentrated Buffer with PCR-grade water.
- Transfer 2 µl of the Blood/Liquid Sample into a tube containing 100 µl to 200 µl of 1x concentrated Extraction Buffer (a dilution of Blood 1:50 to 1:100 in 1x Extraction Buffer is recommended).
- Close the tube and vortex for 15 sec
- Incubate the tube at room temperature (20-25 °C) for 2-3 min.
- Transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay.

#### b) Samples from nasal or throat swabs

- Dilute 10x Extraction Buffer to 1x concentrated Buffer with PCR-grade water.
- Transfer 200 µl 1x Extraction Buffer into a 1.5 ml microtube
- Cut off the cotton tip with the collected nasal or throat swab and place it in the micro tube
- Close the tube and vortex for 15 sec
- Incubate at room temperature (20-25 °C) for 2-3 min
- Remove the cotton tip and squeeze it out at the rim of the tube
- Centrifuge briefly and transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay.

#### c) Samples from Animal or Plant Tissue

- Dilute 10 x Extraction Buffer to 1 x concentrated Buffer with PCR-grade water.



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- Prepare a small piece from animal or plant tissue not exceeding 8 mm in diameter
- Crack plant seeds to less than 1 mm in diameter using a Bead-Beater, Tissue Lyser or small hammer
- Place the sample in a 1.5 ml microtube
- Add 1x concentrated Extraction Buffer to the tissue sample as following:

Sample size (diameter)	1-2 mm	3-4 mm	5-8 mm
1x Extraction Buffer	50 µl	100 µl	200 µl

- Mix briefly by tapping or vortexing and make sure that the sample is soaked with Extraction Buffer
- Incubate at room temperature (20-25 °C) for 3 min
- Centrifuge briefly and transfer 1-2 µl of the supernatant into a 20 µl qPCR assay or 2-5 µl into a 50 µl qPCR assay.



**Signal word:** Danger

**Hazard statements:**

H314 Causes severe skin burns and eye damage.

**Precautionary statements:**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

For further information see Safety Data Sheet.