

**Data sheet**

This data sheet provided for information only

**PCR<sup>PIUs</sup> Core Kit**

RESEARCH USE ONLY

**Set of reagents for “anti-contamination” DNA amplification**

PCR<sup>PIUs</sup> Core Kit is the set of separate high quality reagents for routine PCR amplification.

| Cat. No.    | Pack    | Conc. |
|-------------|---------|-------|
| Dia-CU03100 | 100 rxn | -     |
| Dia-CU03101 | 500 rxn | -     |

**Stability:**

All components are stable for 24 months at -20°C.

**CONTENT:**

250U DiaTaq Polymearse  
 0.4ml of dNTP's MIX (2.5mM each of dATP,dCTP,dGTP and 7,5mM dUTP)  
 0,5ml 50 mM MgCL<sub>2</sub> Stock solution  
 0.5 ml 10X Reaction Buffer  
 5 ml PCR Grade Water

**DESCRIPTION**

PCR<sup>PIUs</sup> Core Kit is recommended for use in “anti-contamination” PCR reactions. dNTP's MIX pLUs contains dUTP instead of dTTP and permits to produce U-containing ds-DNA.

Resulting DNA amplicon should be degraded, prior to the next amplification to avoid false-positive results, due to anti-contamination, by **Uracil DNA Glycosilase** (not supplied). 10X Reaction buffer optimized for high specificity PCR with **DiaTaq DNA Polymerase**.

**Recommended PCR assay**

| 50µl PCR assay |                        | Final Conc. |
|----------------|------------------------|-------------|
| 0.5µl          | DiaTaq Polymerase      | 2.5U        |
| 5 µl           | 10X Reaction Buffer    | 1X          |
| 1.5-2.5µl      | 50mM MgCL <sub>2</sub> | 1.5-2.5mM   |
| 4 µl           | dNTP's PIUs MIX*       | 0.2mM each  |
| 0.2-1µM        | each Primer            |             |
| Variable**     | DNA Template           |             |
| To 50µl        | PCR Grade Water        |             |

\*- Final dNTP's concentrations:

dA,dC,dG -200µM,dUTP -600µM

\*\* - depending on DNA template initial concentration

For optimal specificity of amplification an individual optimization of concentrations/parameters may be necessary for each new DNA template and/or primers pair

**APPLICATIONS:**

- Routine PCR
- Primer extension
- Starting optimization

**STORAGE CONDITIONS :**

Store all components of PCR<sup>PIUs</sup> Core Kit at -20°C (for long term storage).

**SHIPPING CONDITIONS:**

Should be shipped at ambient temperature  
 For long distance shipments preferably in **Blue Ice**