



SwiftX™ DNA

Technical Sheet

▶ SwiftX™ DNA – versatile by design

SwiftX DNA (25) is designed to match the workflow and performance of the discontinued QIAGEN SpeedXtract® Nucleic Acid Kit. For that, the kit contains:

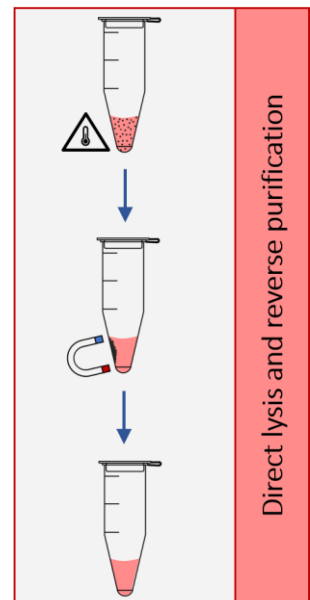
- **Buffer EN** (25mL): stabilizes biological cells and facilitates cell binding to magnetic particles
- **Beads A** (0.75mL): bifunctional magnetic particles – enable cell concentration as well as inhibitor removal by reverse purification
- **Buffer DL** (12.5mL): formulated to support efficient heat-lysis of cells and to allow the use of a high volume of lysate per PCR reaction

▶ Direct extraction – rapid and powerful

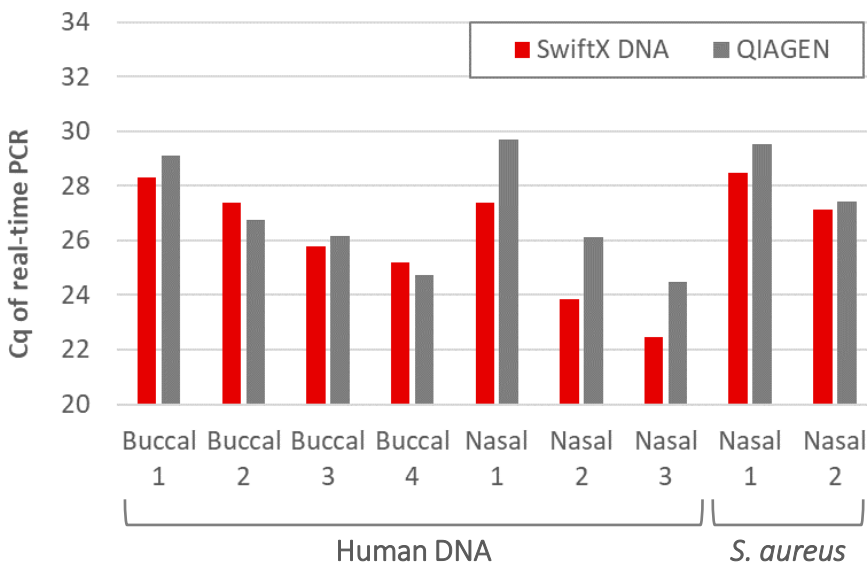
- Powerful heat-driven lysis of a wide range of targets, i.e. viruses, bacteria, parasitic protozoa, as well as animal & human cells in as short as 5 minutes
- **Superior** to competitor's simple lysis methods due to embedded bead-based **inhibitor removal** (reverse purification)
- Applicable for direct DNA extraction from:
 - ✓ Swabs (e.g. buccal⁽¹²⁾, nasal⁽¹²⁾, pharyngeal⁽¹²⁾, rectal⁽¹²⁾)
 - ✓ Pre-concentrated cells^(9,12)
 - ✓ Dried blood spots, blood cards
 - ✓ Tissue samples (e.g. skin^(1,3,12), muscle, liver, brain⁽²⁾, bone marrow)
 - ✓ Fine-needle aspirates⁽³⁾
 - ✓ Tissue fluid⁽³⁾, cerebrospinal fluid
 - ✓ Hair follicles⁽¹²⁾, tongue scrapings



tissues, cells, swabs



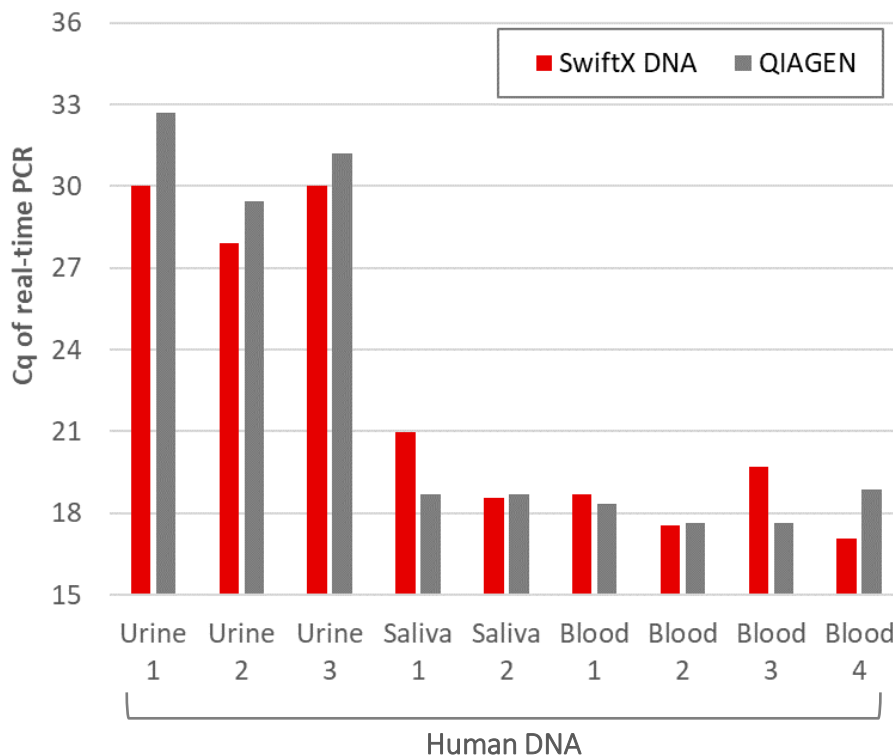
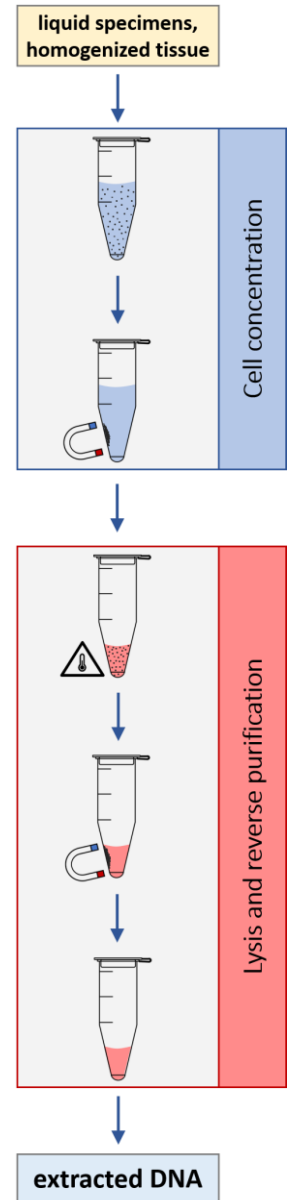
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► **Centrifugation-free cell concentration from liquid specimens**

- Non-specific binding of cells to concentrate analytes and remove inhibitors before DNA extraction. Proven to work with:
 - ✓ Human and animal cells (leukocytes^(4,12), epithelial⁽¹²⁾, nervous tissue⁽²⁾)
 - ✓ Parasites (Leishmania^(1,3,4), Plasmodium⁽⁵⁾, Schistosoma eggs^(7,10,14))
 - ✓ Bacteria (e.g. Mycoplasma⁽¹²⁾, Mycobacteria^(8,9), Salmonella^(5,11), Proteus⁽¹²⁾, Escherichia⁽¹²⁾, Streptococcus^(6,11), Listeria⁽¹²⁾, Staphylococcus⁽¹¹⁾, Rhodococcus⁽¹²⁾, Leptospira⁽¹²⁾, Klebsiella⁽¹²⁾, Acinetobacter⁽¹²⁾)
- Applicable to the following sample types:
 - ✓ Whole blood^(4,5,6,12) (up to 200µL sample)
 - ✓ Urine^(7,10,13) (up to 1mL sample)
 - ✓ Saliva⁽¹²⁾, throat washes
 - ✓ Cells in culture medium⁽¹²⁾, samples in transport media⁽¹²⁾
 - ✓ Homogenized tissue suspensions⁽²⁾
 - ✓ Vaginal lavage⁽¹²⁾, liquid-based cytology media⁽¹²⁾



Please note: The referenced publications mention the SpeedXtract® Nucleic Acid Kit, which is equivalent in performance to SwiftX™ DNA

References

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7. Archer *et al.* (2020) *Molecules* 25: 4175
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9. Wende (2014) NDWG Annual Meeting
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11. WO2017067942A1
12. Internal data
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14. Archer *et al.* (2022) *PLOS NTD*

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 Contact information: www.xpedite-dx.com | info@xpedite-dx.com

