

IVD solutions through partnership



MAST ISOPLEX[®]

DNA / RNA Extraction Kit

for extraction of nucleic acids (NA)
of bacteria, viruses and protozoa

- Easy to use

- High quality and purity of
DNA / RNA

- Fast and easy isolation of DNA / RNA
from different sample materials

MASTISOPLEX®

DNA / RNA Extraction Kit

Successful amplification methods depend on well purified nucleic acids (NA). In diagnostics and analytics of agricultural/veterinary and medical samples amplification of NA has many advantages compared to conventional methods. In all cases it is important to have well purified NA for subsequent amplification, hybridisation or sequencing purposes. Purified NA leads to higher analytical assay features as sensitivity or specificity of amplification based tests in difficult matrices.

MASTISOPLEX® DNA / RNA Extraction Kits meet these requirements to perfectly and reliably remove proteins, lipids, polysaccharides and other substances that could interfere with up or downstream applications.



Using **MASTISOPLEX®** DNA / RNA Extraction Kits guarantees highly purified NA yield. The kits use paramagnetic nano-particles for purification and include Proteinase K as a reagent for cell disruption. Isolation and purification can be performed with the kits.

Using **MASTISOPLEX®** DNA / RNA Extraction Kits, NA can be extracted and purified from various source materials e.g. blood, tissue, saliva, cell culture samples or plant material.

There is no need for centrifugation or complex filtration. Thus the **MASTISOPLEX®** DNA / RNA Extraction Kits are a simple, safe and high performance isolation and purification method.



Abb. 2: King Fisher™ FLEX



Abb. 3: Hamilton MICROLAB STARLET

MASTISOPLEX® DNA / RNA Extraction Kits are adapted for manual or automated use on systems such as KingFisher Flex™ or Hamilton Starlet. Adaptation to other open bead-based extraction systems is also possible.

Advantages:

- easy, fast and cost effective
- High quality and purity of DNA / RNA from different starting samples
- Good reproducibility
- Method easily scalable
- Minimal use of hazardous chemicals to reduce health risks
- automatable

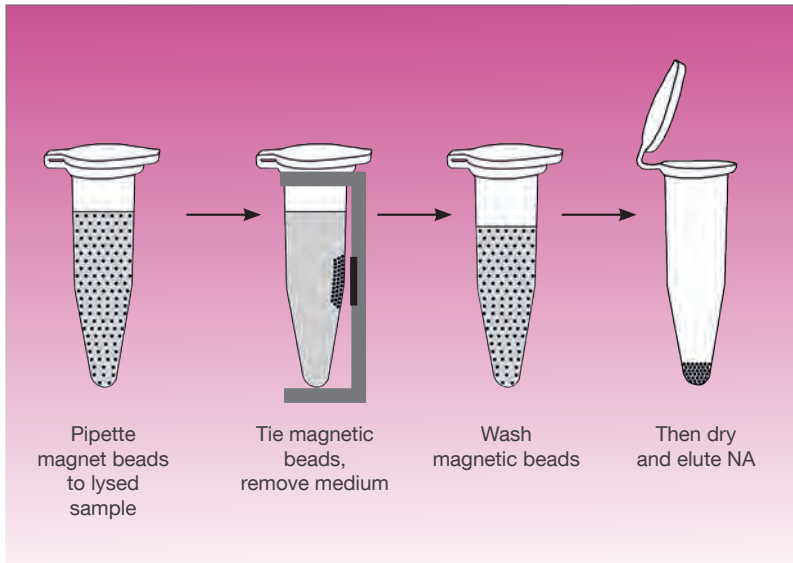


Abb. 4: Short schematic diagram of the traditional isolation of NA in the liquid phase.

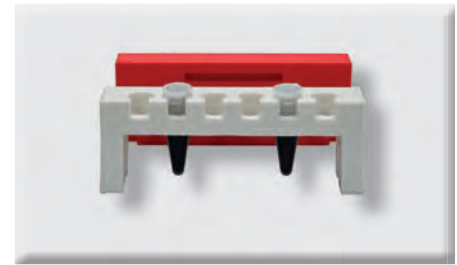


Abb. 5: MASTISOPLEX® Magnet-Rack, 6 cavities



Abb. 6: MASTISOPLEX® Magnet-Rack, 12 cavities

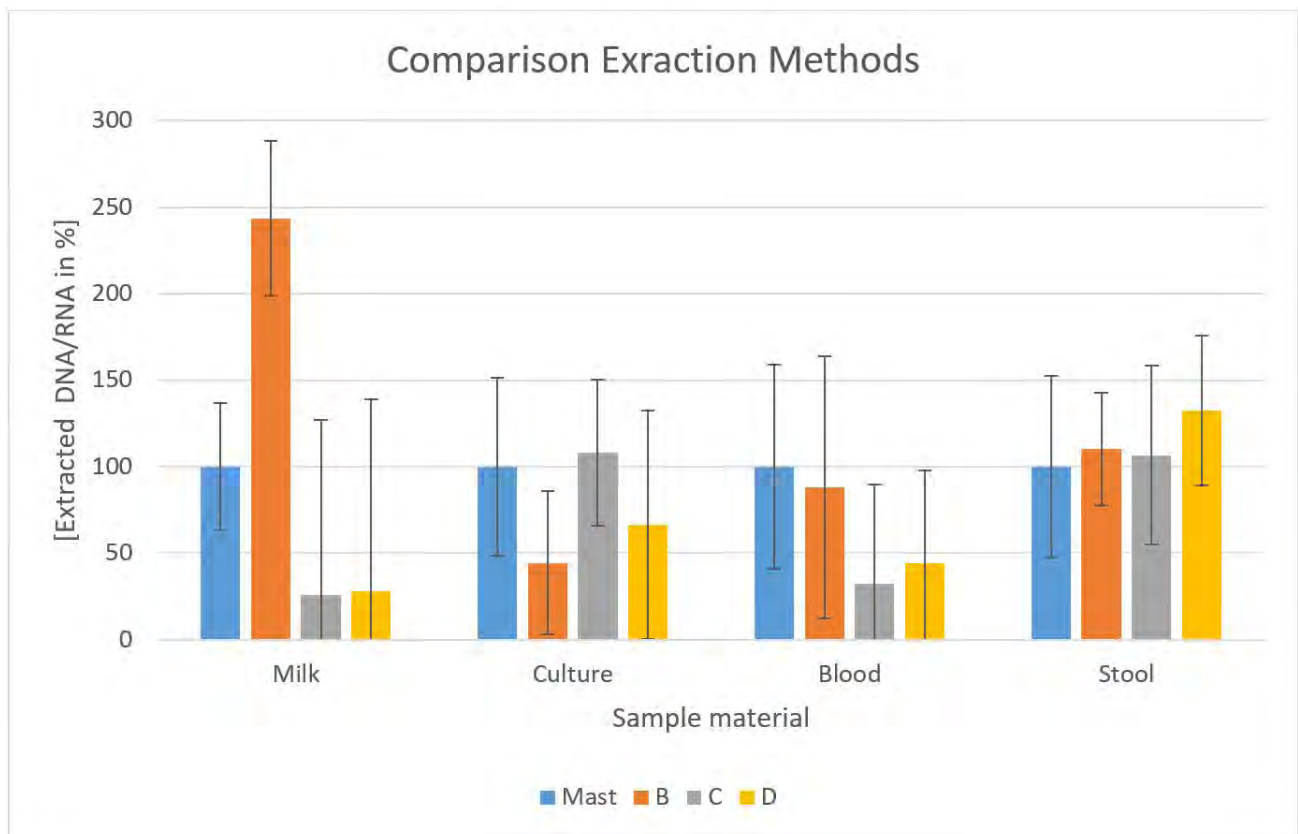


Abb. 7: For the comparison of extraction methods of different manufacturers, 9 samples each were prepared according to the corresponding IFUs and then extracted. Subsequently, the DNA/ RNA content was measured by photometric determination (260 / 280 nm) and related to the sample volumes used. For better comparability, the values of the kit from Mast Diagnostica were set to 100% and the other measured values were related to this.

Assay Data

Product specifications:

- Source material:
Up to 1×10^9 Gram (+) or Gram (-) bacteria
- Test duration:
45 min after the lysis step or approximately 60 min total time
- Binding capacity: > 50 µg NA
- The typical yield is sufficient for amplification procedures, up to 35 µg

Ordering Information

Order Code	Product	Pack Size
67DNAEX	MAST ISOPLEX® DNA/RNA Extraction Kit	50 tests
67DNAEXA	MAST ISOPLEX® DNA/RNA Extraction Kit	960 tests
67KFSET	Plate set for KingFisher™ Flex	960 determ.
75MR-06	MAST ISOPLEX® Magnet-Rack	6 cavities
75MR-12	MAST ISOPLEX® Magnet-Rack	12 cavities
67CARNA	MAST ISOPLEX® Carrier-NA, lyophilised	1 mL

Further Products

Order Code.	Product	Pack Size
67COV2-2	MAST ISOPLEX® SARS-CoV-2	100 tests
67DNALY5	MAST ISOPLEX® CRE-ART	10 tests
67DNALY1	MAST ISOPLEX® DNA Lyo	100 tests
75MD12	MAST ISOPLEX® MD12 - Thermocycler for fluorescence analysis	

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