

1

Methods described in this manual

This manual describes all the products Roche Applied Science currently sells for manual nucleic acid purification and isolation. They are grouped according to the purification methods they use:

- *High Pure technology and silica adsorption* combine centrifugation, chromatography on glass fibre fleece, and chaotropic salt extraction. These rapid purification kits eliminate traditional solvent extraction, precipitation, and electrophoresis steps.
- *Ion exchange chromatography* uses different conditions for binding and release of nucleic acids. Solutions are just poured or pipetted into the matrix-filled columns which are run by gravity flow. The DNA obtained by this method has a purity comparable to that obtained when purified twice by CsCl gradient centrifugation.
- *Solution-based isolation* uses proprietary cell lysis and extraction methods that are quicker and safer than standard methods. These products can prepare nucleic acids with minimal handling.
- *Affinity purification* exploits the hybridization properties of nucleic acids. These products eliminate time-consuming centrifugation and electrophoresis steps.
- *Gel filtration* relies on “spin columns” that are ready to use. These columns take just min to separate nucleic acids from salts, unincorporated nucleotides, linkers, or excess primers.

Intendend use

All products mentioned in this manual are intended for general laboratory use.

All these products combine proven, reliable nucleic acid purification methods with Roche Applied Science talent for optimization and innovation. Let this manual show you how our line of nucleic acid purification and isolation products can:

- Process more samples in less time
- Minimize nucleic acid loss and degradation
- Improve the performance and reliability of downstream applications

Increase laboratory efficiency and safety



We've also included in this manual a short overview of our automated nucleic acid isolation system and of our premium products for PCR and RT-PCR. For detailed information please refer to www.roche-applied-science.com.