



BEXS 12 & Ready DNA Kits

THE DNA EXTRACTION

Automated and manual DNA isolation systems

Ready Gene

SuBiTo

FluoGene

Software

PCR & Electrophoresis

Ready Plate

DNA Extraction

Life Science

BEXS 12 FOR AUTOMATED DNA EXTRACTION

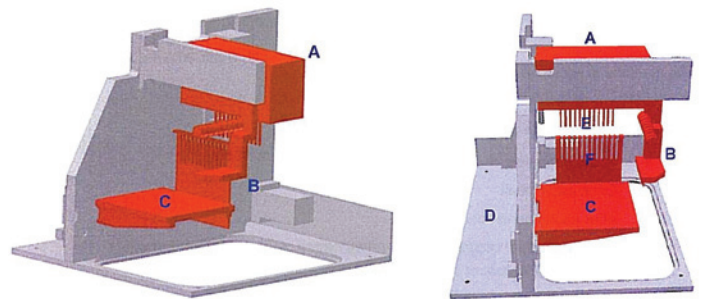
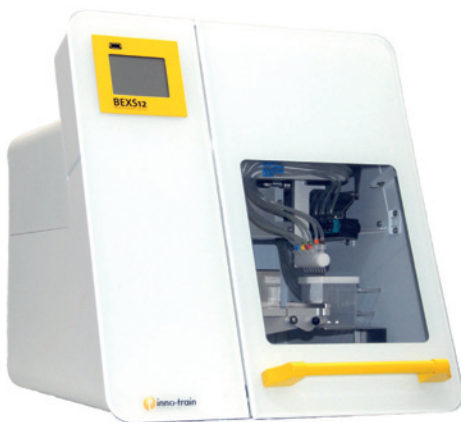
BEXS 12 Bead Extraction System is a fully automatic machine for DNA extraction from blood based on magnetic particle separation technology. In combination with the BEXS 12 Ready DNA Bead Kit the system enables the parallel processing of up to 12 blood samples with a volume of 250 µl each. DNA extraction time is as short as 40 minutes for up to 12 samples per batch. The obtained DNA purity has a ratio of $A_{260}/A_{280} \sim 1.8$ with a yield dependent on the original material of 5 - 10 µg DNA.

BEXS 12 System is CE certified in combination with BEXS 12 Ready DNA Bead Kit and the use of **inno-train's** SuBiTo,

Ready Gene and FluoGene test kits.

A convenient handling of the system is guaranteed by an integrated automated buffer dispensing and a supplied barcode reader. Hands on time is minimized. The instrument is easily operated by a user friendly touchscreen.

Separation of magnetic particles is achieved by metal rods being magnetized by an external magnet, which can be switched on and off. Efficient resuspension of magnetic particle pellets is accomplished by rotation of the rods. With this proven technology all centrifugation and labor intensive resuspension steps are omitted.



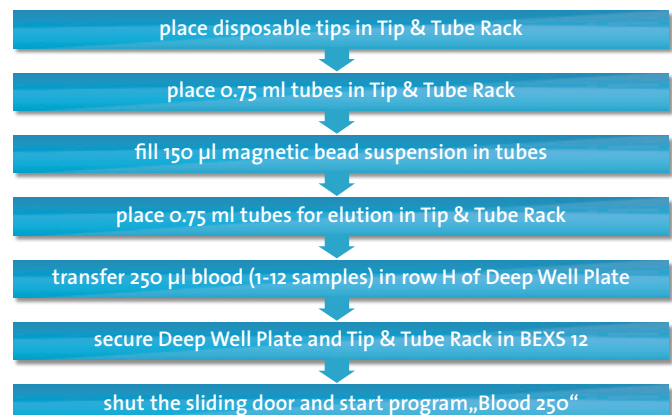
Interior view: BEXS 12 consists of 6 main parts

- A: Magnet & motor for magnetisation and rotation of separation rods
- B: Buffer dispensing unit for 7 different buffers
- C: Working platform for 96-Deep Well Plates, tips & tubes
- D: Space for control unit
- E: Separation unit with 12 rotating & magnetizable rods
- F: Disposable tip stripper

SCOPE OF DELIVERY

- BEXS 12 instrument
- power cable
- barcode reader
- pen for operating the touchscreen display
- BEXS 12 Tip & Tube Rack
- holders for set of buffer bottles
- bottle spikes
- BEXS 12 bottle tubing set
- calibration plate with corresponding 1.4 ml tubes
- technical documentation

WORKFLOW



The DNA extraction is conducted in BEXS 12 Deep Well Plates with 96 cavities. The disposable tips, the magnetic bead suspension and the tubes with the elution buffer are placed in the BEXS 12 Tip & Tube Rack.

BEXS 12 & Ready DNA Kits

MANUAL DNA EXTRACTION WITH MAGNETIC BEADS

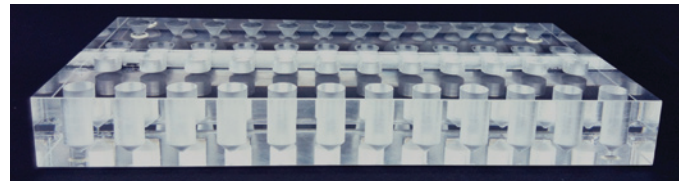
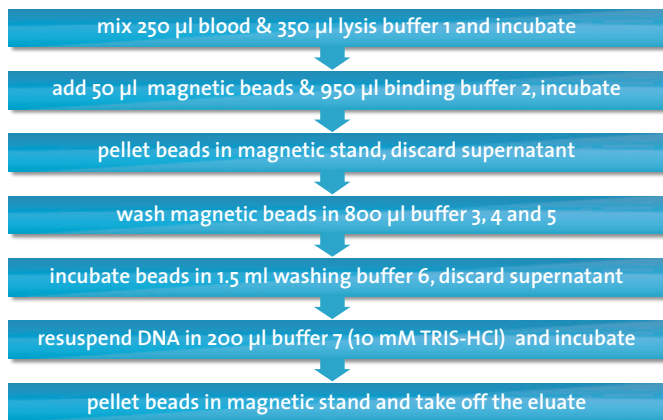
The Ready DNA Bead Kit is based on the DNA feature to adsorb on the surface of specially coated magnetic particles in the presence of chaotropic salts. After adsorbance of the DNA to the magnetic beads contaminations can be removed easily by washing the particles. Afterwards the DNA is dissolved from the magnetic beads with an elution buffer and can be used for all downstream applications after removal of the beads.

The manual DNA extraction with the Ready DNA Bead Kit takes approximately 30 minutes. The test system supplies an

optimal DNA purity with a ratio of $A_{260}/A_{280} \sim 1.8$ and a yield between 5 - 10 μg DNA depending on the raw material used.

The parallel DNA extraction of up to 12 samples of blood or Buffy Coat with a volume of 250 μl each is carried out with a magnetic stand (Ready DNA Bead Stand). This has 2x12 cavities for 2 ml and for 1.5 ml reaction tubes respectively. The inner rows are the magnetic positions, while the outer rows are not affected by the axial magnet.

WORKFLOW



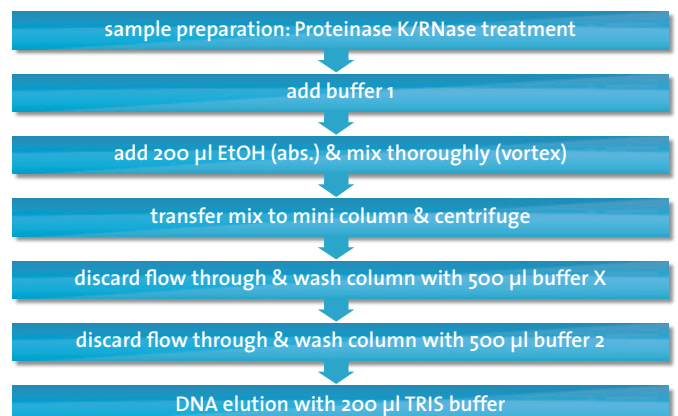
magnetic stand (Ready DNA Bead Stand)

MANUAL DNA EXTRACTION WITH MINI CENTRIFUGATION COLUMNS

The Ready DNA Spin Kit relies on the ability of DNA to adsorb to silica surfaces in the presence of chaotropic salts. This test system offers a universal protocol for a fast and reliable DNA extraction from different sources (i.e. blood, cell culture, tissue). The obtained DNA can be used for all downstream applications as PCR, cloning or southern blotting.

The Ready DNA Spin Kit is sufficient for 50 extractions. The dissolved DNA has a purity of $A_{260}/A_{280} \sim 1.8$ and a yield of approximately 5 - 10 μg depending on the sample material used. The DNA extraction procedure takes roughly about 30 minutes.

WORKFLOW



BEXS 12 AUTOMATED DNA EXTRACTION & ACCESSORIES

ARTICLE NO.	PRODUCT	UNIT
GX01050	BEXS 12 Bead Extraction System	1
GX01052	BEXS 12 Ready DNA Bead Kit For automated DNA isolation with the BEXS 12 Bead Extraction System Kit components: <ul style="list-style-type: none"> • Magnetic bead suspension • BEXS 12 set of 7 buffer bottles - fixed on a yellow hanger plate and barcoded • 15 Deep Well Plates • 384 Tubes for elution • 192 disposable rod tips 	180 extractions
GX01061	BEXS 12 Deep Well Plates For automated DNA extraction with the BEXS 12 Bead Extraction System	20
GX01062	BEXS 12 DNA elution tubes	384
GX01060	BEXS 12 Bottle Spikes, replacement set	7
GX01070	BEXS 12 Bottle Tubing set Tubing set including quick fasteners	7

MANUAL DNA EXTRACTION WITH MAGNETIC BEADS

ARTICLE NO.	PRODUCT	UNIT
GX01051	Ready DNA Bead Stand Magnetic stand for manual DNA extraction	1
GX01053	Ready DNA Bead Kit For manual DNA isolation with the Ready DNA Bead Stand Kit components: <ul style="list-style-type: none"> • Magnetic bead suspension • Lysis buffer 1 • Bindung buffer 2 • Washing buffers 3-6 • Elution buffer 7 	50 extractions

MANUAL DNA EXTRACTION WITH MINI COLUMNS

ARTICLE NO.	PRODUCT	UNIT
GX01027	Ready DNA Spin Kit For manual DNA isolation with mini centrifugation columns Kit components: <ul style="list-style-type: none"> • Buffer 1, Buffer 2, Buffer X • TRIS-HCl buffer • Proteinase K • RNase • 50 mini-centrifugation columns • 2x 50 empty tubes (2 ml) 	50 extractions

