

The BioBanker device:

The BioBanker device simplifies sampling and biobanking of medical, environmental, or food tissue samples, for downstream biological or molecular analysis. A simple push-twist-pull movement excises and withdraws a standardised core sample of tissue. The device is then immediately locked into a standard, or barcoded SBS footprint test tube. This seals and protects the sample from cross contamination. The tube can contain an appropriate lysis buffer or preservative (e.g. RNeasy, RNALater, RNAssist). The unique windowed design of the sampling tip ensures immediate buffer impregnation or lysing of the cored sample, even if the tube is lying sideways or upside-down.

Features & Benefits

- Simple: sampling is rapid, consistent, reproducible.
- Safe: no scalpels, knives, weigh scales, or tweezers needed.
- Sealed: comes in sterile pack; cored sample is sealed in tube.
- Rapid: a few seconds to open, push, twist, pull, store.
- Reliable: minimizes sampling & handling errors.
- Traceability: barcoded tubes (supplied) facilitate bio-banking, tracking, rack-storage, and secure identification.

Specifications:

- Sample volume 45mg nom; sample dependent, see Tbl.1
- Coeff. Variation (CV) 15% typ – see Tbl. 1
- Sample-tip material Polycarbonate
- Tube Material Polypropylene
- Autoclavable Yes
- Tube Dimensions 1.4 mL tube: W 8.74, H 21.38 mm
- 2D Code Choices 12x12 with ECC20

Applications:

- Biobanking of tumours
- Tissue biopsies
- Food sampling
- Faecal sampling
- DNA, RNA sample preparation
- Genotyping
- High-volume in-line sampling

Accessories Available:

- Hand-held barcode scanner and data-base analysis system. This facilitates decoding and sample-data integration into spreadsheets, databases, and existing LIMS/tracking systems
- Proteinase-K lysis buffer
- RNA-Later
- **RNAssist** – custom fixative, extra stability, long-term room-temp storage
- Assays and whitepapers are available on DNA rapid extraction and purification methods, and RNA capture and fixation

Ordering options (all sterile):

- BioBanker only – bag of 960 loose
- BioBanker in 0.75mL tube – plain, 2D, or 1D/2D barcoded tube options, in X48 individually sealed packing, or sealed tray of 96.

Push → Twist & Pull → Store

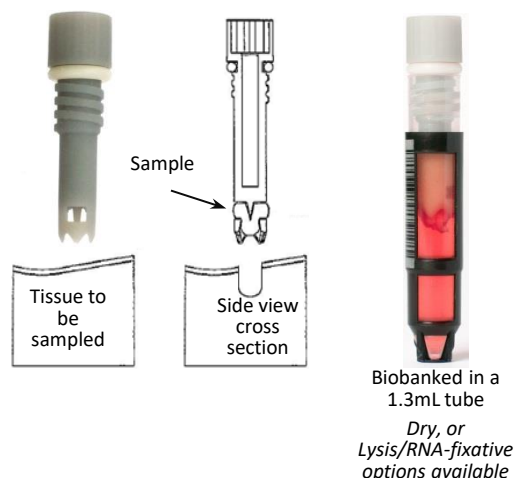


Table 1: Typical Performance: 100 Food samples (20 each):

Food Type	Sample Time (sec)	Mean Sample (mg)	CV
Mushrooms	8	35.6	12.9%
Gigot Lamb Chop	12	44	13.8%
Mango	8	47.5	10.1%
Bean Sprouts	22	47.9	13.1%
Sweet Red Pepper	29	49	10.6%
Beef Round Steak	10	49.4	15.3%
Pork Chop	18	50.9	9.8%
Chicken Breast	8	54.7	14.0%
White Cheddar	12	58.9	10.4%
Nectarine	13	59.5	10.2%



Typical BioBanker Applications



Medical sampling/biobanking



Meat & Fish speciation

*Tip: Do not push completely through. Works best on samples > 1cm thickness.
Twist until BioBanker device rotates freely with no more resistance; then store sample.*



Food & vegetable analysis



Beef genotyping, with barcode scanning and data upload to LIMS database