

Saliva DNA Collection and Isolation

The GeneFix™ range of DNA products have been designed to simply maximise the yields and purity of DNA collected and stabilised from Saliva. Isohelix has over the years built a leading reputation for designing and manufacturing DNA sampling and purification products, built around their unique High Yielding DNA Buccal Swabs together with their associated kits to stabilise and isolate your DNA. The new GeneFix™ products use many shared chemistries and knowledge designs from our existing swab DNA isolation kits, and where technically appropriate these have been re-configured or method developed to optimise their use solely on saliva stabilised either from the GeneFix™ collectors or other saliva collection devices. The resulting DNA collected through GeneFix™, as with the Isohelix Buccal DNA, can be used in the most demanding downstream processes.

DNA Saliva Collectors and Assisted Collectors

GeneFix™ is a new easy to use and economical DNA saliva collection device, designed specifically to store and stabilise long term DNA for 1 or 2 ml Saliva samples. The collection tube is pre-filled with a fully tested and chemically optimised stabilisation buffer. The simple screw-on funnel enables the saliva sample to be delivered directly and quickly into the buffer.

Clear, legible markings on the GeneFix™ collection tubes indicate the correct volume of Saliva to be delivered, prior to removing and sealing the tube, the unique funnel design prevents spillages and flow back even when accidentally knocked over. The collection tubes will withstand defined physical pressures that have been specified for leak proof sample transport and are designed for either manual or more automated application with printed bar codes and caps options being suitable for auto de-capping machines.

GeneFix™ Assisted DNA Saliva Collectors are especially useful where donors find it difficult to delivery saliva, such as children. The assisted kits contains the standard GeneFix components and 2 absorbent swabs to assist the saliva collection, the swab is simply squeezed against the inside of funnel to release the saliva into the 1ml of stabilized buffer. Expected DNA yields are on average around 25µg and would be purified with exactly the same format and results as the standard GeneFix™ collectors.

Product information

Each GeneFix™ device includes a collection tube with stabilisation buffer, optional swabs, funnel and instructions

Accessories

Choice of collection tubes for manual or automated applications
Pre-printed bar codes
Additional Proteinase K for the Lysis step

Lysis Step

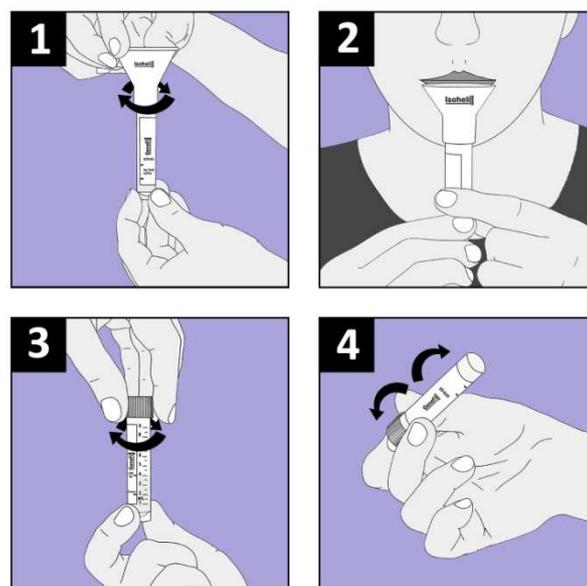
GeneFix™ samples integrate directly with DNA kits containing Proteinase K for Cell Lysis, or PK can be added manually for pre-treatment



Key Benefits

- ✓ Easy to Use with Pre-Filled Stabilisation buffer.
- ✓ Unique funnel design prevents buffer spillages.
- ✓ DNA Stabilised for 60 months+ at Room Temp*.
- ✓ DNA yields maintained for 60+ months*.
- ✓ Total DNA yields in excess of 100µg from 2ml saliva.
- ✓ Seamlessly integrates with 3 GeneFix™ Isolation kits.
- ✓ Saliva-Prep kit delivers ultra low RNA contamination.
- ✓ The devices are compatible with Manual and HT kits.
- ✓ Fully tested on most downstream applications.
- ✓ Specified 95kPa for leak proof mailing and return.
- ✓ Widely supported with Technical DNA data.

* In ongoing and continued rigorous testing.



GeneFix™ Saliva DNA Isolation Kits

From the very outset we developed a number of different isolation kits based around alternative chemistries, to optimise the key requirements of purity, yield and ease of use. Each individual isolation method has been specifically designed to maximise one key outcome that is of most importance to a particular application or researcher. By offering a number of choices, this allows the users to select a kit that is most suitable to their downstream process which in turn improves the results that they can expect from their application or test.

New Advanced Saliva-Prep 2 DNA Isolation Kits

The New Advanced GeneFix™ Saliva-Prep 2 DNA Isolation kits have been designed to provide significant technical improvements for purity over our original Saliva Prep Kits. The Saliva Prep 2 is designed for use with Stabilized Saliva collected primarily from GeneFix™ Collectors, as well as from many other saliva collection devices. The isolation protocol itself is based around a new design precipitation chemistry that has a number of additional key advantages: being rapid, very easy to use, and with high yields and most importantly producing extremely high purities.

It also has other significant advantages, being Ethanol and Solvent free, and virtually zero co-precipitation of RNA with the DNA, thereby resulting in ultra low RNA contamination in the final DNA samples. The processing choices are widely flexible to allow for varying volumes from a few 100µl up to 2ml of saliva and even larger if required

The DNA yields are exceptional and greatly in excess of 100µg with typical A260/280 values of around 1.8 and with A260/230 typically in also excess of 1.8. In our experiments these ratios compare extremely favourably against similar, and other alternative precipitation type chemistries.

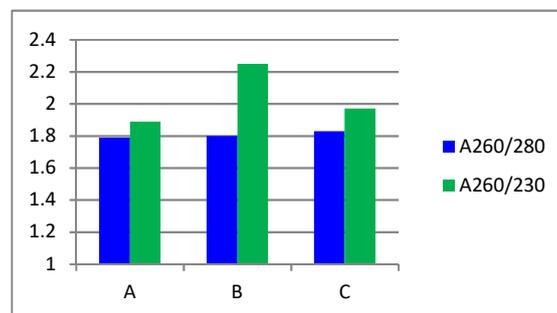
Saliva-Prep 2's practical advantages make it the method of choice for a rapid and efficient isolation method that is easy to use and offers outstanding yields.



Features

- ✓ High Yields > 100µg DNA from 2ml of raw Saliva
- ✓ Economic , easy to use and extremely robust
- ✓ High Purity suitable for virtually all applications
- ✓ Fully Optimised for use with Stabilised Saliva
- ✓ No Solvents, Columns or Filtration requirements
- ✓ Delivers virtually RNA-free samples
- ✓ Rapid Handling Times
- ✓ Easily adjustable for varying sample volumes.

Nanodrop data from GSPN purified saliva DNA showing high purity DNA



Agarose gel of GSPN purified saliva DNA showing intact, clean high molecular weight DNA with minimal RNA contamination

