



DNA
gard®

BLOOD
Quick Reference Protocol

Whole Blood Stabilization

Sample Collection

- **Add DNAgard Blood formulation to the whole blood specimen at a final ratio of 1:4 (stabilizer to blood).**

For example, add 1 ml DNAgard Blood to 4 ml whole blood.

- **Mix well by pulse-vortexing or inversion (at least 8 inversions).**

Notes: To facilitate efficient mixing of stabilizing reagent and sample it is important that the final volume of the mixture not exceed 2/3 the fill capacity of the storage vessel.

DNAgard Blood formulation can be added directly to an evacuated blood collection tube (e.g., Vacutainer® or Vacuette®...). DNAgard Blood formulation can also be pre-aliquoted into microfuge tubes or larger tubes such as Falcon tubes (the order of addition does not matter).

Sample Recovery

Genomic DNA can be recovered by multiple methods from blood samples stored in DNAgard Blood.

Methods include column-based methods, magnetic bead technologies and salting out protocols.

We have confirmed compatibility with the following commercially available kits:

- QIAamp Blood Mini Kit (QIAGEN)
- FlexiGene DNA Kit (QIAGEN)
- ChargeSwitch gDNA Blood Kit (Invitrogen)

For highest recovery yields, we recommend using the QIAGEN FlexiGene DNA Kit.

Notes: In all cases, the blood-stabilizer mixture should be treated as a whole blood sample when calculating reagent volumes in the isolation protocol.

As heat may induce protein precipitation in blood samples and result in possible protein co-purification with DNA when performing salting-out protocols. In order to obtain the cleanest DNA we recommend using column-based purification methods for samples exposed to high temperatures (> 37 °C). Refer to the DNAgard Blood Handbook for more information.



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DNAgard® Blood is designed for shipping and storage of DNA in mammalian whole blood. DNA in blood is protected by the unique stabilization properties of DNAgard Blood. Samples can be shipped and kept at room temperature, removing the need for frozen shipment, storage or immediate processing. DNAgard Blood is easy to use – blood samples are applied into the DNAgard Blood solution, mixed, and kept at room temperature. Samples can be stored in DNAgard Blood for at least 8 months at room temperature. Samples stored in DNAgard Blood are ready for immediate processing for DNA recovery via standard laboratory procedures (see the sample recovery section).

Kit components

- **DNAgard Blood** 50ml (# 62501-036) or 100ml (# 62501-046).
- **Protocol**

Kit Storage

DNAgard Blood must be stored at room temperature. Use within 12 months of purchase date for optimal product performance. DNAgard Blood stabilizes genomic DNA in mammalian whole blood for at least 8 months at room temperature in a liquid storage format.

Product Use Limitations

The DNAgard Blood test kit is for research use only. No claim or representation is intended to provide information for the diagnosis, prevention, or treatment of disease.

Safety Information

DNAgard Blood contains chaotropic salt and other chemicals that are harmful if swallowed and irritating to eyes and skin (R22-R36/38, S13/26/36/46). Please refer to the DNAgard Blood MSDS at www.biomatrica.com

Technical Assistance

Biomatrica, Inc. takes pride in providing efficient quality technical support.

Technical Service Department:

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