



Research Models and Services

Health Monitoring

Dry Blood Spot Collection Protocol

The Dry Blood Spot (DBS) technique provides a simple way for collecting, shipping, and storing blood samples for serological testing. Because of the extremely low volume of blood required, samples can be obtained from live animals. Supporting the use of DBS sample collection is another example of Envigo's continuing efforts to improve animal welfare and promote the 3Rs.

Materials required

DBS does not require any specialized instruments, centrifuges, pipettes or vials. Envigo supplies, free of charge, the following materials:

- + DBS cards (non-irradiated)
- + Desiccant
- + Plastic shipping bag

Sample collection (mice and rats only)

Drops of whole blood are applied to the sample area of the card. After air-drying, the card is placed in a sample bag together with the desiccant and submitted to our lab via normal mail. No refrigeration or sample preparation, such as centrifugation, is needed.

- + Ante-mortem blood samples can be obtained from various locations, including heart, saphenous vein and other suitable sites
- + One drop of blood can be spotted directly on a DBS card, placing the filter paper on the drop



- + If the blood sample is taken by a capillary tube or by syringe, spot one drop (25µl) directly onto the circle printed on the card. The circle printed on the card is a guide only; it isn't necessary to fill the complete circle with blood
- + In case blood samples in separate circles coalesce, the samples cannot be used
- + Please note: 1 drop for mice, 3 drops for rats
- + After sampling, leave the card to air dry for a minimum of 1 hour
- + Secure the card using the tab
- + Once collected, samples can be stored at 4°C until shipping

Sample labeling

It's important that the sample identification meets the references provided on the submission form, therefore;

- + Complete the information on the DBS Card, incl. customer information and sample identification
- + Provide unique numbers to the individual disk

Date:			_
	1	1	
	6	为	

Whatman 903™ LOT 6973514 W121



Sample shipment

Samples are stable for at least 7 days at room temperature.

- + Dry blood is inert and inactive.
- + Place the cards with desiccant inside the bags (max of 4 cards per bag)
- + Make sure the submission form is filled out including indicating for which agents samples should be tested
- + Put the bag(s) in a padded envelope, including the submission form, and ship this at ambient temperature to one of the labs listed below by regular post or in case of urgency by overnight courier
- + It's advisable to pre-announce your shipment by sending our lab a short email. We can then acknowledge receipt of the samples
- + Serology results will be communicated to the customer after a maximum of 4 working days from receipt of samples

To request free of charge DBS Cards, desiccant and plastic shipping bags, please contact your local account manager or either of the following Envigo Laboratory facilities:

UK: Customer Services

Dodgeford Lane, Belton Loughborough Leicestershire, LE12 9TE United Kingdom

Tel: +44 1530 222123

Email: RMS-UK-Technical-services@envigo.com

EU Continent: Health Monitoring Lab

Via Campestre, 25 20091 Bresso Italy

Tel: +39 02 6145 1011

Email: healthmonitorlab@envigo.com

