

# **Interferon-gamma test sample delivery box specification**

**December 2017**

Samples **MUST** be packed and delivered using a temperature-controlled biological specimen packaging system/box to enable safe and effective transportation of samples for interferon testing.

The delivery system/box system should maintain sample temperature within the range  $22\pm 5^{\circ}\text{C}$  during shipment – this is the range specified by the test manufacturer for optimum performance of the test.

Samples must reach the testing laboratory within 24 hours of being taken from the animal. The delivery system must therefore maintain ambient temperature for the entire journey.

Submissions will be temperature-checked upon arrival at the laboratory and any falling outside of the recommended temperature range limits will be rejected (not tested).

The delivery system/box must be prepared following the manufacturer's instructions in order to achieve and retain ambient temperature throughout delivery.

If using a battery-operated heat-pad system (e.g. Biotherm), ensure the battery is fully charged and connected to the heat pad.

If using box inserts/cassettes (e.g. Orca, DHL box), ensure these are conditioned correctly to ambient temperature (N.B. over-heating will damage the sample).

Fill any empty air space in the box with packaging material such as bubble wrap or paper towel – this will help to maintain ambient temperature within the box during transit.

Examples of temperature controlled delivery boxes include:

DGP/Intelsius Biotherm battery boxes

<http://intelsius.com/temperature-controlled-packaging-and-cold-chain-solutions/biotherm>

DGP/Intelsius Orca box

<http://intelsius.com/temperature-controlled-packaging-and-cold-chain-solutions/orca>

DHL Controlled room temperature packaging boxes

[http://www.dhl.co.uk/content/dam/downloads/g0/express/services/industry/dhl\\_express\\_temperature\\_sensitive\\_packaging\\_brochure\\_en.pdf](http://www.dhl.co.uk/content/dam/downloads/g0/express/services/industry/dhl_express_temperature_sensitive_packaging_brochure_en.pdf)

N.B. while we are aware that this box is available, APHA have no practical experience of using it.