1. INTENDED USE
This material is a serially diluted panel intended to be run as a complete panel in molecular assays designed for the detection of Influenza A, H1N1. It must be extracted prior to amplification. Panels contain samples diluted from a high concentration to a low concentration. The material can be used to understand assay sensitivity by end-point analysis.

2. CAUTION
This preparation is not for administration to humans or animals in the human food chain.

3. UNITAGE
An arbitrary unit has been assigned to this material. The panel is a serial dilution from the highest concentration in Sample 1 to the lowest concentration in Sample 6. Sample 1 contains 1,000,000 units, Sample 2 100,000 units, Sample 3 10,000 units, Sample 4 1,000 units, Sample 5 100 units and Sample 6 10 units. Sample 7 is a negative control and should not give any signal.

4. CONTENTS
Country of origin of biological material: United Kingdom. This panel comprises 7 samples, each containing 1 mL of sample. Samples 1-6 are a serial dilution of a cultered strain of Influenza A H1N1 (California). All dilutions have been performed in PBS. Sample 7 is a negative PBS sample. The cultured material has been inactivated using heat and efficacy has been proven via further culture methods. This material is therefore provided as a non infectious panel.

5. STORAGE
This panel should be stored at -20 °C or below (preferably -70 °C if available) upon receipt and continue to be stored at that temperature until use.

6. DIRECTIONS FOR OPENING
Vials have a screw cap; an internal stopper may also be present. The cap should be removed by turning anti-clockwise. Care should be taken to prevent loss of the contents. Please note: If a stopper is present on removal of the cap, the stopper should remain in the vial or be removed with the cap.

7. USE OF MATERIAL
No attempt should be made to weigh out any portion of the freeze-dried material prior to reconstitution.

This material is intended to be thawed and directly extracted, no further manipulation is required.

8. STABILITY
Reference materials are held at NIBSC within assured, temperature-controlled storage facilities. Reference Materials should be stored on receipt as indicated on the label. This material has been demonstrated to be stable when left at +4 °C for 24 hrs.

9. REFERENCES
N/A

10. ACKNOWLEDGEMENTS
N/A

11. FURTHER INFORMATION
Further information can be obtained as follows;
WHO Biological Standards:
http://www.who.int/biologicals/en/
JCTLM Higher order reference materials:
http://www.bipm.org/en/committees/jc/jctlm/
 derivation of International Units:
http://www.nibsc.org/standardisation/international_standards.aspx
Ordering standards from NIBSC:
http://www.nibsc.org/products/ordering.aspx
NIBSC Terms & Conditions:
http://www.nibsc.org/terms_and_conditions.aspx

12. CUSTOMER FEEDBACK
Customers are encouraged to provide feedback on the suitability or use of the material provided or other aspects of our service. Please send any comments to enquiries@nibsc.org

13. CITATION
In all publications, including data sheets, in which this material is referenced, it is important that the preparation’s title, its status, the NIBSC code number, and the name and address of NIBSC are cited and cited correctly.

14. MATERIAL SAFETY SHEET
Classification in accordance with Directive 2000/54/EC, Regulation (EC) No 1272/2008: Not applicable or not classified

<table>
<thead>
<tr>
<th>Physical and Chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical appearance: Liquid frozen</td>
</tr>
<tr>
<td>Stable: No</td>
</tr>
<tr>
<td>Hygroscopic: No</td>
</tr>
<tr>
<td>Flammable: No</td>
</tr>
<tr>
<td>Other (specify): None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicological properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of inhalation: Not established, avoid inhalation</td>
</tr>
<tr>
<td>Effects of ingestion: Not established, avoid ingestion</td>
</tr>
<tr>
<td>Effects of skin absorption: Not established, avoid contact with skin</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suggested First Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation: Seek medical advice</td>
</tr>
<tr>
<td>Ingestion: Seek medical advice</td>
</tr>
</tbody>
</table>
Contact with eyes: Wash with copious amounts of water. Seek medical advice.
Contact with skin: Wash thoroughly with water.

### Action on Spillage and Method of Disposal

Spillage of ampoule contents should be taken up with absorbent material wetted with an appropriate disinfectant. Rinse area with an appropriate disinfectant followed by water. Absorbent materials used to treat spillage should be treated as biological waste.

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15. **LIABILITY AND LOSS**

In the event that this document is translated into another language, the English language version shall prevail in the event of any inconsistencies between the documents.

Unless expressly stated otherwise by NIBSC, NIBSC’s Standard Terms and Conditions for the Supply of Materials (available at [http://www.nibsc.org/About_Us/Terms_and_Conditions.aspx](http://www.nibsc.org/About_Us/Terms_and_Conditions.aspx) or upon request by the Recipient) (“Conditions”) apply to the exclusion of all other terms and are hereby incorporated into this document by reference. The Recipient’s attention is drawn in particular to the provisions of clause 11 of the Conditions.

16. **INFORMATION FOR CUSTOMS USE ONLY**

<table>
<thead>
<tr>
<th>Country of origin for customs purposes*: United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Defined as the country where the goods have been produced and/or sufficiently processed to be classed as originating from the country of supply, for example a change of state such as freeze-drying.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net weight: 1g</th>
</tr>
</thead>
</table>

Toxicity Statement: Toxicity not assessed

Veterinary certificate or other statement if applicable.

Attached: No