Influenza Reagent
Influenza Antiserum A/chick/Germany/N/49
NIBSC code: 03/244
Instructions for use
(Version 3.0, Dated 25/08/2011)

1. INTENDED USE
Influenza antiserum reagent 03/244 is prepared in sheep for immunological assay of A/chick/Germany/N/49 antigens.

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

The material is not of human or bovine origin. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used and discarded according to your own laboratory's safety procedures. Such safety procedures should include the wearing of protective gloves and avoiding the generation of aerosols. Care should be exercised in opening ampoules or vials, to avoid cuts.

3. UNITAGE
No unitage is assigned to this material.

4. CONTENTS
Country of origin of biological material: United Kingdom.
The antiserum was prepared in sheep SH422 to the purified HA of A/chick/Germany/N/49. The HA antigen was extracted from inactivated and purified virus by treatment with bromelain and purified by sedimentation on sucrose gradients (Brand, CN and Skehel, JJ, Nature, New Biology, 1972, 238, 145-147). The immunization schedule for SH422 was as follows: One dose of approximately 50µg of HA with Freund's complete adjuvant was given intramuscularly, followed two weeks later with a 10µg dose in the presence of Freund's incomplete adjuvant (FIA), three further 10µg doses including FIA were given at weekly intervals. Six weeks after the initial immunization, serum was collected and sodium azide (0.05% w/v) was added.

The serum was diluted with phosphate buffered saline containing sodium azide (0.05% w/v) and filled into vials in 2ml volumes.

5. STORAGE
+2-8°C
Please note: because of the inherent stability of lyophilized material, NIBSC may ship these materials at ambient temperature.

6. DIRECTIONS FOR OPENING
Vials have a 'flip-up' circular cap. Either on the cap or the collar of the vial, there is an indication of the point at which to lever off the cap. This exposes an area of the stopper through which reconstitution and withdrawal of the preparation can be made using a hypodermic needle and syringe. If use of a pipette is preferred, then fully remove the metal collar using, for example, forceps, taking care to avoid cuts by wearing appropriate gloves. Remove the stopper for access. Care should be taken to prevent loss of the contents.

7. USE OF MATERIAL
Antiserum reagent 03/244 may be used for tests of A/chick/Germany/N/49 antigens using immunological assays such as haemagglutination inhibition, virus neutralisation and single radial diffusion.

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, please also see attached storage information sheet.

NIBSC follows the policy of WHO with respect to its reference materials.

9. REFERENCES
N/A

10. ACKNOWLEDGEMENTS
N/A

11. FURTHER INFORMATION
Further information can be obtained as follows;
This material: enquiries@nibsc.org
WHO Biological Standards:
http://www.who.int/biologicals/en/
JCTLM Higher order reference materials:
http://www.bipm.org/en/committees/jcclin/
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>
<th>Corrosive: No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical appearance:</td>
<td>straw coloured liquid</td>
</tr>
<tr>
<td>Stable:</td>
<td>Yes Oxidising: No</td>
</tr>
<tr>
<td>Hygroscopic:</td>
<td>No Irritant: No</td>
</tr>
<tr>
<td>Flammable:</td>
<td>No Handling: See caution, Section 2</td>
</tr>
<tr>
<td>Other (specify):</td>
<td>Contains sheep serum and sodium azide</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Suggested First Aid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation:</td>
</tr>
<tr>
<td>Ingestion:</td>
</tr>
<tr>
<td>Contact with eyes:</td>
</tr>
<tr>
<td>Contact with skin:</td>
</tr>
</tbody>
</table>

National Institute for Biological Standards and Control,
Potters Bar, Hertfordshire, EN6 3QG. T +44 (0)1707 841000, nibsc.org
WHO International Laboratory for Biological Standards,
UK Official Medicines Control Laboratory
Action on Spillage and Method of Disposal

<table>
<thead>
<tr>
<th>Action on Spillage and Method of Disposal</th>
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<tbody>
<tr>
<td>Spillage of 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.</td>
</tr>
</tbody>
</table>

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 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>
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<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>
<tr>
<td>Net weight: 2g</td>
</tr>
<tr>
<td>Toxicity Statement: Non-toxic</td>
</tr>
<tr>
<td>Veterinary certificate or other statement if applicable.</td>
</tr>
<tr>
<td>Attached: Yes SH422 plus Storage Information sheet</td>
</tr>
</tbody>
</table>
STORAGE OF REAGENT 03/244

NIBSC has prepared a number of reagents for single radial diffusion assay of influenza subtypes of pandemic potential.

Since it is not known when these reagents may be required, it is desirable that they have an indefinite shelf life and they are stored at NIBSC in colder conditions than reagents prepared for the assay of epidemic strains. Therefore the recommended storage temperature marked on the label for reagent 03/244 is -20°C.

However it is assumed that a customer ordering this reagent, will use it within a short period similar to that for a conventional reagent. Consequently, this reagent is not normally shipped frozen and **the recommended storage temperature is +4°C.**
Veterinary Certificate

This is to certify that sheep no. 2625 was used for the production of blood antiserum between January and February 2003 to prepare reagent SH422.

This sheep was a ewe that was surplus to breeding requirements, in overt good health, and showed no signs of clinical disease.

R.M. Hull
BVSc, PhD, MRCVS
Named Veterinary Surgeon