



Influenza Reagent Influenza anti B/Shangdong/9/97 Serum NIBSC code: 03/110 Instructions for use (Version 5.0, Dated 30/05/2014)

#### 1. INTENDED USE

Influenza reagent is prepared in sheep for single radial diffusion assays of B/Shangdong/7/97 antigens, using an appropriate NIBSC antigen reagent.

#### CAUTION 2.

#### 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 (SH425/426) to the purified HA of B/Shangdong/7/97 virus. The HA antigen was extracted from purified virus by treatment with bromelain and purified by sedimentation on sucrose gradients (Brand, C N and Skehel JJ, Nature, New Biology, 1972, 238, 145-147). One dose of approximately 50 micrograms of HA with Freund's complete adjuvant (FCA) was given intramuscularly, followed two weeks later with a 10 microgram dose including Freund's Adjuvant (FIA) and four further 10 microgram doses at weekly intervals.

Seven weeks after the initial immunization, the sera were collected, pooled and diluted 1:4 with PBS buffer containing sodium azide (0.05% w/v) and filled into vials in 2 ml volumes. The mean weight of 39 vials test weighed was 2.04g with a coefficient of variation of 0.59%.

#### 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

#### No attempt should be made to weigh out any portion of the material

For the assay of virus antigens containing 20-50 micrograms of HA activity in 1ml, 10µl of the undiluted Reagent should be added to 1ml agarose. Antigens of lower concentration (5-20 micrograms HA/ml) are assayed, by adding 5µl of the Reagent to 1ml agarose. It may be necessary to change these antiserum concentrations according to local laboratory conditions.

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Antiserum Reagent 03/110 should be used according to the method described by Wood, JM, Schild GC, Newman RW and Seagroatt, VA. Journal of Biological Standardisation, 1977, 5, 237-247.

#### 8. STABILITY

It is the policy of WHO not to assign an expiry date to their international reference materials. They remain valid with the assigned potency and status until withdrawn or amended.

Reference materials are held at NIBSC within assured, temperaturecontrolled storage facilities. Reference Materials should be stored on receipt as indicated on the label. Once reconstituted, diluted or aliquoted, users should determine the stability of the material according to their own method of preparation, storage and use.

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

Users who have data supporting any deterioration in the characteristics of any reference preparation are encouraged to contact NIBSC.Reference materials are held at NIBSC within assured, temperature-controlled storage facilities. Reference Materials should be stored on receipt as indicated on the label.

#### 9. REFERENCES

None

#### 10. ACKNOWLEDGEMENTS None

#### 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/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

Physical and Chemical properties			
Physical appearance: Liquid	Corrosive:	No	
Stable:	Oxidising:	No	
Yes			

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Hygroscopic:	Irritant:	No		
No				
Flammable:	Handling:	See caution, Section 2		
No	-			
Other (specify): Contains Sheep Serum and Sodium Azide (0.05%				
w/v)Please complete				
Toxicological properties				
Effects of inhalation: Avoid inhalation				
Effects of ingestion: Avoid ingestion				
Effects of skin absorption: Avoid contact with skin				
Suggested First Aid				
Inhalation: Se	Seek medical advice			
Ingestion: Seek medical advice				
Contact with eyes: Wash with copious amounts of water. Seek				
medical advice				
Contact with skin: W	ash 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.

## 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

Country of origin for customs purposes\*: United Kingdom \* 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. Net weight: 2g Toxicity Statement: Non toxic

Veterinary certificate or other statement if applicable.

Attached: Yes SH425-426

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## **Veterinary Certificate**

This is to certify that sheep numbers 2618 (SH425) and 2620 (SH426) were used for the production of blood antiserum between February and April 2003 to prepare reagent 03/110.

The sheep were ewes that were surplus to breeding requirements, in overt good health and showed no signs of clinical disease.

National Institute for Biological Standards and Control

## R.M. Hun

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



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