



**Influenza Reagent**  
**Influenza virus infectious NYMC BX-39**  
**NIBSC code: 12/202**  
**Instructions for use**  
**(Version 1.0, Dated 01/11/2012)**

**1. INTENDED USE**

Reagent 12/202 is prepared from NYMC BX-39 which was processed for freeze drying in 250µl volumes as described by Campbell, P.J. Journal of Biological Standardisation, 1974, 2,249-267. The known passage history of NYMC BX-39 is attached

**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.  
Each ampoule contains 250µl (nominal) of infectious influenza virus as allantoic fluid from SPF embryonated hen's eggs.

**5. STORAGE**

Store in the dark at -20°C or below

**Please note: because of the inherent stability of lyophilized material, NIBSC may ship these materials at ambient temperature.**

**6. DIRECTIONS FOR OPENING**

DIN ampoules have an 'easy-open' coloured stress point, where the narrow ampoule stem joins the wider ampoule body. Various types of ampoule breaker are available commercially. To open the ampoule, tap the ampoule gently to collect material at the bottom (labelled) end and follow manufactures instructions provided with the ampoule breaker.

**7. USE OF MATERIAL**

Reconstitute the contents of one ampoule of reagent with 250µl of sterile distilled water. Leave for a minimum of 5 minutes before use to allow for complete solution of freeze-dried material. A range of dilutions (e.g. 10<sup>-3</sup> to 10<sup>-5</sup>) should be made in a suitable medium for initial cultivation.

**8. STABILITY**

Reference Materials should be stored on receipt as indicated on the label.

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

**9. REFERENCES**

NA

**10. ACKNOWLEDGEMENTS**

NA

**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](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](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: white powder	Corrosive: No
Stable: Yes	Oxidising: No
Hygroscopic: No	Irritant: No
Flammable: No	Handling: See caution, Section 2
Other (specify): Live influenza virus	
Toxicological properties	
Effects of inhalation:	Likelihood of influenza virus infection
Effects of ingestion:	Not established, avoid ingestion
Effects of skin absorption:	Not established, avoid contact with skin
Suggested First Aid	
Inhalation:	Seek medical advice
Ingestion:	Seek medical advice
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 contents should be taken up with absorbent material wetted with an appropriate virucidal agent. Rinse area with an appropriate virucidal agent followed by water. Absorbent materials used to treat spillage should be treated as biologically hazardous 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](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**

<b>Country of origin for customs purposes*:</b> 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.
<b>Net weight:</b> NA
<b>Toxicity Statement:</b> Non-toxic
<b>Veterinary certificate or other statement</b> if applicable.
<b>Attached:</b> No

**Passage history of NYMC BX-39 (Post mixed infection)**

Passage	Lot	Laboratory
E1 – E6		NYMC, New York, USA
E7	E#5916	NYMC, New York, USA
E8	33430	NIBSC, Hertfordshire, UK

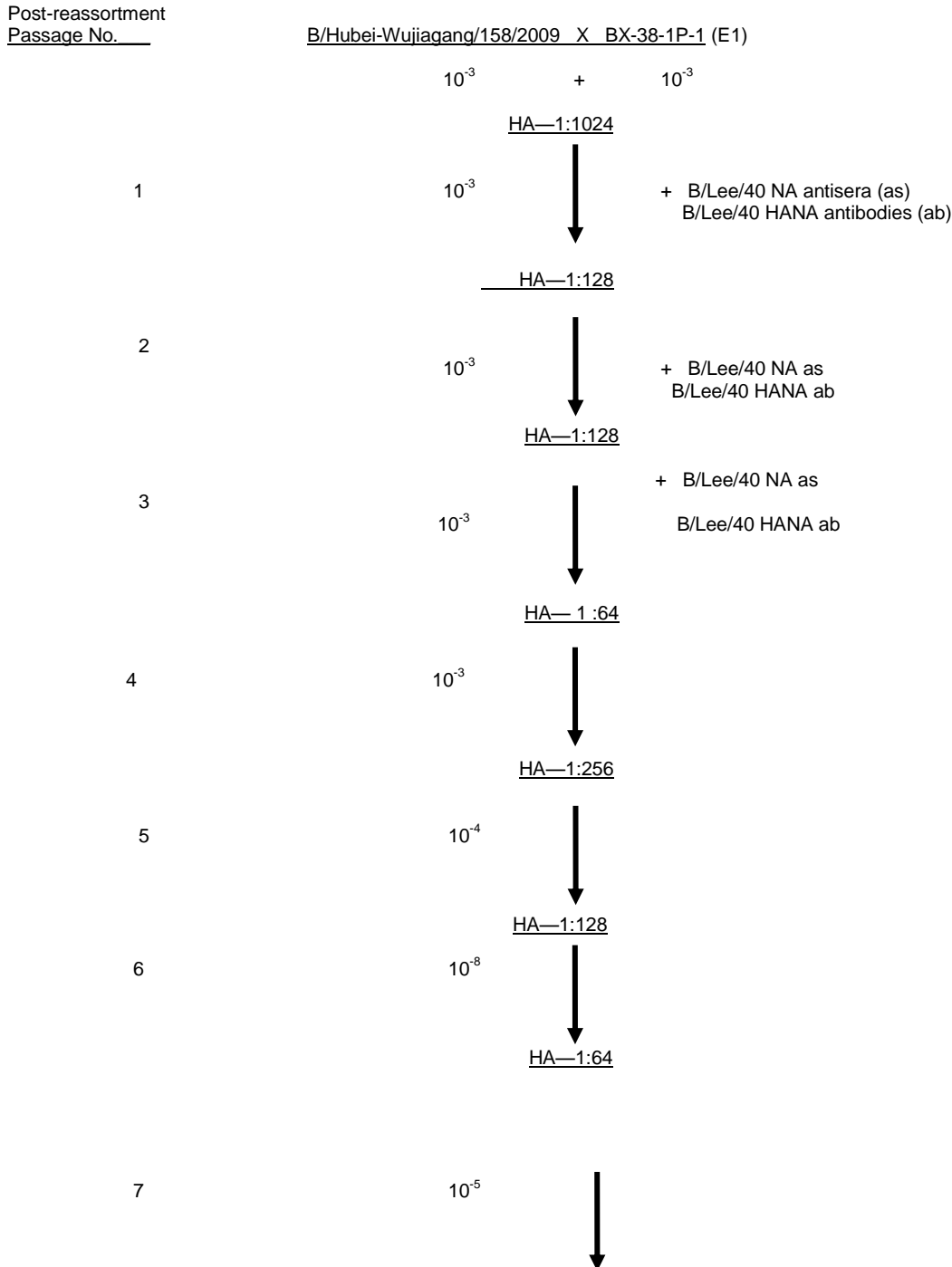
## Derivation of NYMC BX-39

National Institute for Biological Standards and Control,  
Potters Bar, Hertfordshire, EN6 3QG. T +44 (0)1707 641000, [nibsc.org](http://nibsc.org)  
WHO International Laboratory for Biological Standards,  
UK Official Medicines Control Laboratory



## B/Hubei-Wujiagang/158/2009 (Yamagata lineage) – like High Yield Reassortant (2:2:4) with B/Panama/45/90 PA, NS, B/Lee/40 PB2 and NP genes

Exper. # 4658 5/19/10  
 B/Hubei-Wujiagang/158/2009 CDC#2010728941 E2/E2 (2/16/10) HA:32  
 BX-38-1P-1: B/Lee/40-like high yield reassortant with B/Panama/45/90 PA and NS genes





HA—1:512

**NYMC BX-39**

E#5916 NYMC archive  
Shipped to CDC—Dec. 7, 2010  
CDC ID# 2011700329

HA and NA identified as B/Hubei-Wujiagang/158/2009 by RT-PCR/RFLP analysis of HA and NA genes. RT-PCR/RFLP analysis also identified PB1 and M genes as B/Hubei-Wujiagang /158/2009, PA and NS genes as B/Panama/45/90, and PB2 and NP genes as B/Lee/40. SPAFAS eggs used for all reassortant passages. HA titer was tested using chicken red blood cells at room temp.



**DEPARTMENT OF HEALTH & HUMAN SERVICES**

Public Health Service

Centers for Disease Control  
and Prevention

Doris Bucher, Ph.D  
Department of Microbiology and Immunology  
New York Medical College  
Basic Science Building  
Valhalla, NY 10595

Dear Dr. Bucher,

We appreciate your submitting influenza reassortants to CDC for analysis. Data from your laboratory and other collaborating laboratories worldwide contribute significantly towards the influenza vaccine recommendations made each year by WHO.

The results we obtained with your reassortants are listed and interpreted below.

<b>CDC ID#</b>	<b>Specimen ID#</b>	<b>Results</b>
2011700329	B/HUBEI-WUJIAGANG/158/09 BX-39	CONSISTENT WITH B/HUBEI- WUJIAGANG/158/2009-LIKE PASS

Your reassortants have HI reactivity patterns that are consistent with their corresponding wild type viruses.

If you have any questions, please contact us.

Sincerely,



Dr. Alexander Klimov  
Deputy Director  
WHO Collaborating Center for Surveillance,  
Epidemiology and Control of Influenza