Medicines & Healthcare products Regulatory Agency



#### Influenza Reagent Influenza Virus Infectious BX-93A (B-Victoria Lineage) NIBSC code: 21/156 Instructions for use (Version 6.0, Dated 11/06/2021)

#### 1. INTENDED USE

Reagent 21/156 is prepared from BX-93A (B-Victoria Lineage) which was processed in 250µl volumes as liquid stock. The derivation and known passage history of BX-93A (B-Victoria Lineage) 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 vial contains 250µl (nominal) of infectious influenza virus as allantoic fluid from SPF embryonated hen's eggs.

#### 5. STORAGE

Store in the dark at -70°C or below

#### 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

Ready to use

#### 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/

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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

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#### 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:		Corrosive:	No		
Clear liquid					
Stable:	Yes	Oxidising:	No		
Hygroscopic:	No	Irritant:	No		
Flammable:	No	Handling:See	caution, Section 2		
Other (specify):	Live influenz	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.

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#### 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: 0.25g per vial Toxicity Statement: Non-toxic

Veterinary certificate or other statement if applicable. Attached: No

## Passage history of BX-93A (B-Victoria Lineage)

Cumulative number of passages	Passage numbers at each stage	Lot	Laboratory
E1-E3	E3	Unknown	Unknown
E4-E13	E3/E10	E#6462	NYMC, USA
E14	E3/E10/E1	46090	NIBSC, UK

Sterility: No visible contamination was detected in a variety of media (tryptose soya broth, thioglycolate broth, Sabouraud's broth and blood agar plates) after 14 days incubation.

The HA and NA sequence of this virus is available at GISAID with the accession number EPI\_ISL\_2458112.

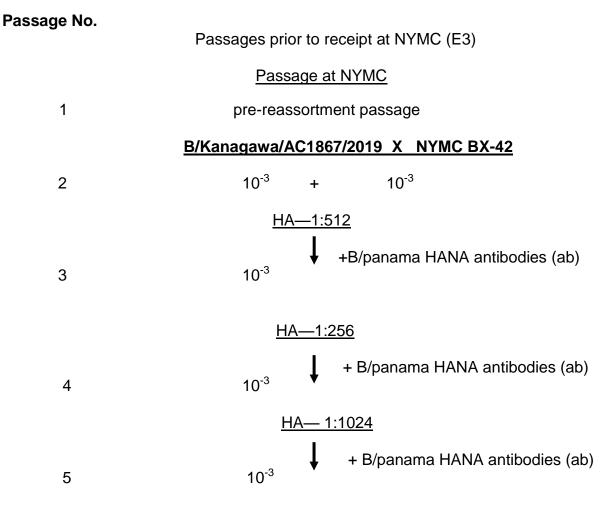


# Derivation of NYMC BX-93A

# B/Kanagawa/AC1867/2019 (Victoria lineage) - like Reassortant (4:4) B/Panama : B/Kanagawa with B/Panama/45/1990 PA, PB1, PB2, NS genes and B/Kanagawa/AC1867/2019 HA, NA NP and M genes

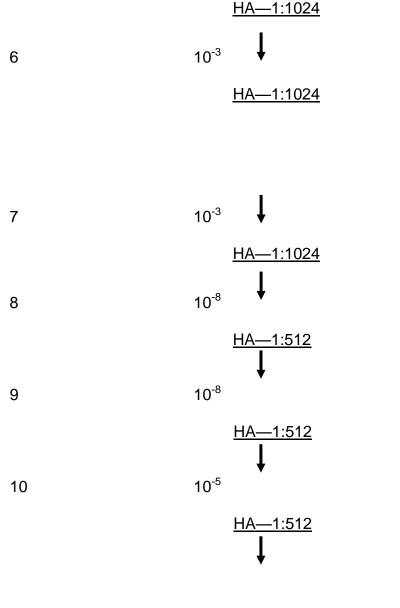
Exper. # 4868 12/07/20 B/Kanagawa/AC1867/2019 (Victoria lineage) Received from the NIID in Sept 2019 Passage\*: E3 HA titer: 512

NYMC BX-42: Hybrid strain with B/Panama/45/1990 PB1, PB2, PA, NS, HA, NA and B/Lee/40 NP and M genes



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## NYMC BX-93A (E3:E10) E#6462 NYMC archive

BX-93A: HA, NA, NP and M genes identified as B/Kanagawa/AC1867/2019 by RT-PCR/RFLP analysis. PA, PB1, PB2 and NS genes are from B/Panama/45.

SPAFAS eggs were used for all passages. HA titers were performed using chicken red blood cells at room temp.

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Virus seeds were shown to be sterile by streaking samples on sheep blood agar plates and incubating for 48 hours at 37 °C.

UPLC result indicated that HA yield from BX-93A is 0.92 fold vs wild type.

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