Medicines & Healthcare products Regulatory Agency

NIBSC Confidence in Biological Medicines

CE Marked Material
Negative Control For FCXM
NIBSC code: 09/112
Instructions for use
(Version 11.0, Dated 10/11/2017)

This material is a self certified IVD and complies with the requirements of the "EU in vitro diagnostic medical device directive 98/79/EC".

1. INTENDED USE

This product is CE marked for use as an IVD within the UK, EU member states and EEA countries. In all other territories this product can be used for research purposes only.

Prior to organ transplantation, flow cytometry cross matching is performed to detect anti-HLA antibodies that may be detrimental to the performance of the organ. Findings from multicentre studies have shown not only the importance of the selection and standardization of the methods used for cross-matching, but also that the selection of the control sera is fundamental to the cross-match, as they are the negative controls on which the definition of positivity is based (Harmer et al 1996; Shenton et al 1997). Transplants known to have taken place after a positive FCXM result may have impaired survival (Scornik et al 2001).

2. CAUTION

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

Each unit used for the production of this standard was individually tested and found to be negative for the presence of HBsAg and antibody to HCV and HIV 1 and 2. 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. The plasma was filtered through 0.2µm filters and stored under sterile conditions before filling into vials (1.0 ml/vial) and freeze-drying.

3. UNITAGE

No unitage assigned. This is an anti-HLA negative control.

4. CONTENTS

Country of origin of biological material: United Kingdom. Freeze-dried residue of approximately 1.0ml of pooled normal human AB+ plasma.

5. STORAGE

Prior to reconstitution, this material has an expiry date of 2029/05. Accelerated degradation studies have indicated that this material is suitably stable when stored at 2-8ºC prior to reconstitution. Reference materials should be stored on receipt as indicated on the label. Once reconstituted, users should determine the stability of the material according to their own method of preparation, storage and use. It is recommended this material be used on the day of reconstitution.

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 freeze-dried material prior to reconstitution

To reconstitute this material, dissolve the entire contents of the ampoule in 1ml of sterile distilled water, keep at 2-8ºC and use on the day of reconstitution. Once reconstituted, this material should be treated as normal human AB+ plasma for use as a negative control for flow cytometry cross matching (FCXM). Different instruments and different assays may yield varying results, therefore it is important that each user validates this control using their own platform(s). It is not intended for use in calibration of individual laboratory standards. No attempt should be made to weigh out a portion of the freeze-dried material, nor should aliquots be re-frozen after use. It is recommended that this standard be used in combination with 07/214 Positive Control for FCXM (minimum potency positive control standard). Users should be aware that by changing assay conditions or reagents e.g. incubation times or secondary antibodies, assay results may vary. It is therefore important that each user validates this control using their own methods and reagents.

The Preparation and Biological Activity please refer to page 2.

8. STABILITY

The expiry date is stated on the vial label. The stability of this preparation is monitored by NIBSC. Users who have data supporting any deterioration in the characteristics of this 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

1.Harmer, A.W., Garner, S., Bell, A.E. et al (1996). Evaluation of the flow cytometric crossmatch. Preliminary results of a multicentre study. Transplantation 61, 1108-1111.
2.Shenton, B.K., Bell, A.E., Harmer, A.W. et al (1997). Importance of methodology in the flow cytometric crossmatch: a multicentre study. Transplantation Proceedings 29, 1454-1455.
3.Scornik, J.C., Clapp, W., Patton, P.R. et al (2001). Outcome of kidney transplants in patients known to be flow cytometry crossmatch positive. Transplantation 71, 1098-1102.

10. ACKNOWLEDGEMENTS

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.

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Potters Bar, Hertfordshire, EN6 3QG. T +44 (0)1707 641000, nibsc.org
WHO International Laboratory for Biological Standards,
UK Official Medicines Control Laboratory

CE

14. MATERIAL SAFETY SHEET

Physical and Chemical properties			
Classification in accordance with Directive 2000/54/EC, Regulation (EC) No 1272/2008: Not applicable or not classified Physical appearance: Freeze-dried powder		Corrosive:	No
Stable:	Yes	Oxidising:	No
Hygroscopic:	Yes	Irritant:	No
Flammable:	No	Handling:	See caution, Section 2
Other (specify):	Contains material of human origin		

Toxicological properties	
Effects of inhalation:	Not established, avoid inhalation
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 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: 1.0g
Toxicity Statement: Non-toxic
Veterinary certificate or other statement if applicable**.** **Attached:** No

THE PREPARATION

The standard was prepared from a pool of 38 donations of AB^+ plasma. Prior to pooling, each donation was confirmed negative for anti-HLA antibodies. The plasma pool was filtered through 0.2µm filters and stored under sterile conditions before distribution into vials (1.0 ml/vial) and lyophilized.

BIOLOGICAL ACTIVITY

Donor lymphocytes incubated with FCXM Negative Control standard 09/112 and minimum potency Positive Control standard 07/214.