Medicines & Healthcare products Regulatory Agency

NIBSC Confidence in Biological Medicines

CE Marked Material
17/238 Anti-HLA positive control for FCXM and bead-based assays IFU
NIBSC code: 17/238
Instructions for use
(Version 1.0, Dated 26/03/2019)

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.

This standard is intended for use as a strong positive control for flow cytometry cross matching (FCXM) and Luminex based assays for anti-HLA antibodies. 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. Transplants known to have taken place after a positive FCXM result may have impaired survival (Scornik et al 2001). Additionally FCXM and Luminex based anti-HLA screen assays can be used to identify de novo alloantibody production post-transplantation. 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).

2. CAUTION

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

The preparation contains material of human origin, and either the final product or the source materials, from which it is derived, have been tested and found negative for HBsAg, anti-HIV and HCV RNA. 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 assigned. This is an anti-HLA strong positive run control that is not intended to be used for calibration purposes.

4. CONTENTS

Country of origin of biological material: United Kingdom.
Freeze-dried residue of approximately 0.5ml of pooled human plasma containing anti-HLA class I and II antibodies.

5. STORAGE

This material is suitably stable when stored at -20ºC 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 for this material to be used on the day of reconstitution, and no later than 72h after reconstitution.

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

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 0.5ml of sterile distilled water. Product should be centrifuged, and pellet discarded, if the presence of cryoprecipitate is noticed upon reconstitution of the freeze-dried material. Once reconstituted, this material should be treated as strong positive run control for FCXM and Luminex anti-HLA bead-based assays. Different instruments and assays may yield varying results, therefore it is important that each user validates this control using their own platform(s). Reconstituted material should not be re-frozen after use. It is recommended that this reagent is used in combination with 07/214 weak positive control and 17/212 negative control for FCXM and bead-based assays. 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. FCXM results can vary depending on the donor cells used and set up of the flow cytometer.

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.
Prior to reconstitution, this material has an expiry date of 01/2028. Real-time stability studies have indicated that this material is suitably stable when stored at -20ºC prior to reconstitution.

9. REFERENCES

1 Outcome of kidney transplants in patients known to be flow cytometry crossmatch positive.
Scornik JC, Clapp W, Patton PR et al.
Transplantation. 2001 71:1098-1102
2 Evaluation of the flow cytometric crossmatch. Preliminary results of a multicenter study.
Harmer AW, Garner S, Bell AE, et al.
Transplantation. 1996 Apr 15;61(7):1108-11
3 Importance of methodology in the flow cytometric crossmatch: a multicentre study.
Shenton BK, Bell AE, Harmer AW, et al.
Transplant Proc. 1997 Feb-Mar;29(1-2):1454-5.Please complete this section manually by typing over this text

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

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

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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: 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: 0.5g
Toxicity Statement: Non-toxic
Veterinary certificate or other statement if applicable**.** **Attached:** No

THE PREPARATION

The Anti-HLA positive control 17/238 was prepared from a pool of human plasma containing anti-HLA class I and II antibodies. The material was confirmed to be positive for alloantibodies in FCXM and Luminex anti-HLA assays. The final pool of the positive plasma was filled at 0.5ml/vial and lyophilised.

BIOLOGICAL ACTIVITY

Donor Lymphocytes incubated with Anti-HLA negative control 17/212, weak positive 07/214 and strong positive 17/238