



**Non WHO Reference Material  
Anti-malaria plasma P. vivax  
NIBSC code: 72/348  
Instructions for use  
(Version 3.0, Dated 14/04/2008)**

**This material is not for in vitro diagnostic use.**

**1. INTENDED USE**

This preparation is derived from a patient with a history of malaria. It is for research use only.

It is from a collection of freeze dried plasma prepared at NIBSC in the 1970s. It should be noted therefore that:

- a) Since they are derived from a single individual of unknown immune status they cannot be assumed to contain a comprehensive set of antibodies to any particular antigen or antigen serotype.
- b) None of these preparations have any defined status
- c) The stability of these preparations has not been investigated the preparations have been shown to contain significant amounts of antibody to a limited range of recombinant antigens as shown below, but these levels have not been formally quantitated and cannot be guaranteed to persist.
- d) The ampoules are limited in number and when all available ampoules have been issued it is unlikely that they could be replaced by others with similar characteristics

These sera were obtained from hospital patients who had been diagnosed with malaria : some sera contain antibodies against species other than those responsible for hospitalization as noted : the species of Plasmodium found is noted.

Serum	Plasmodium Sp..diagnosed	Antigen & serotype <i>P.falciparum</i>			<i>P.vivax</i>	
		MSP-2 (3D7)	AMA-1 (3D7)	MSP-1 <sub>19</sub> (K1)	MSP-1 <sub>19</sub>	MSP-1 <sub>19</sub>
72/138	<i>P.falciparum</i>	++	-	-	-	-
72/341	<i>P.falciparum</i>	++	-	+	-	-
72/345	<i>P.falciparum</i>	+++	+	+++	+	+
72/092	<i>P.falciparum</i>	-	-	+	-	-
71/281	<i>P.vivax</i>	-	-	-	-	+++
71/326	<i>P.vivax</i>	+	-	-	-	+++
72/348	<i>P.vivax</i>	-	-	-	-	+++

+++ strong      ++ moderate      + weak - negative

**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 is assigned to these materials.

**4. CONTENTS**

Country of origin of biological material: United Kingdom.

Each ampoule contains a freeze-dried residue comprising, under an atmosphere of nitrogen, of human plasma containing antibodies to P vivax or P falciparum.

**5. STORAGE**

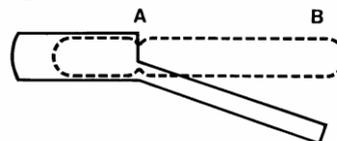
Unopened ampoules should be stored at -20oC or below.

No attempt should be made to weigh out any portion of the freeze-dried material.

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

**6. DIRECTIONS FOR OPENING**

Tap the ampoule gently to collect the material at the bottom (labelled) end. Ensure ampoule is scored all round at the narrow part of the neck, with a diamond or tungsten carbide tipped glass knife file or other suitable implement before attempting to open. Place the ampoule in the ampoule opener, positioning the score at position 'A'; shown in the diagram below. Surround the ampoule with cloth or layers of tissue paper. Grip the ampoule and holder in the hand and squeeze at point 'B'. The ampoule will snap open. Take care to avoid cuts and projectile glass fragments that enter eyes. Take care that no material is lost from the ampoule and that no glass falls into the ampoule.



Side view of ampoule opening device containing an ampoule positioned ready to open. 'A' is the score mark and 'B' the point of applied pressure.

**7. USE OF MATERIAL**

**No attempt should be made to weigh out any portion of the freeze-dried material prior to reconstitution**

Dissolve the total contents of the ampoules with 0.2ml d H2O as follows: Ensure that the entire freeze dried residue is dissolved in this solution.

**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.

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**9. REFERENCES**

**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](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](mailto: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: Freeze dried powder	Corrosive: No
Stable: Yes	Oxidising: No
Hygroscopic: No	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](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:** 0.2g

**Toxicity Statement:** Non-toxic

**Veterinary certificate or other statement** if applicable.

**Attached:** No