

DIVISION OF COMMUNICABLE DISEASES

Parasitic Diseases

INDEXED

INTERNATIONAL REGISTER OF PARASITE ANTIGENS

This register represents a revised edition of the first compilation issued in 1966 (Document PA/265.65). In its present form, the register includes up-to-date information concerning parasite antigens available in various laboratories collaborating with the Parasitic Diseases unit of the World Health Organization.

Data are included on 20 antigens of protozoa and 37 of helminths prepared by 26 laboratories in 14 countries. This information service depends upon the collaboration and cooperation of parasitologists and immunologists engaged in serodiagnosis and fundamental immunological aspects of parasitic diseases. Periodical revisions will be made whenever WHO has been informed that several new and more refined antigens are available.

Those who wish to receive future revisions are requested to advise the Division of Malaria and other Parasitic Diseases, WHO, and, should the information on their laboratory be lacking or incomplete, to indicate the number of additional reporting forms required. One copy of the form is annexed. It will be appreciated if recipients of this document could point out any errors in the register and send the names and addresses of laboratories (or individuals) which prepare antigens but are not yet listed as collaborating institutions.

ABBREVIATIONS USED

BFT	Bentonite flocculation
CFT	Complement fixation test
IFAT	Indirect fluorescent antibody test
ID	Immunodiffusion
IHA	Indirect haemagglutination
IE	Immuno-electrophoresis
ST	Skin test
LT	Lymphocyte transformation
IMM	Inhibition of macrophage migration
SAPA	Soluble antigen fluorescent antibody
LAT	Latex flocculation
SF	Slide flocculation
AGG	Agglutination

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INTERNATIONAL REGISTER OF PARASITE ANTIGENS

Antigen	Parasite (species and state)	Type	State	Stability and storage	Test(s) (see p. 1 for abbreviations used)	Method of preparation (see pp. 9-11)	Availability of antigen		Crude material availability	Available reference serum	Laboratory (see list pp. 5-8)
							Always	With notice			
PROTOZOA	<i>E. histolytica</i> (HRS) (trophozoites)	somatic antigen	frozen extract	- 70°C > 6 months	IHA, ID, IFAT		X		No	Yes	9
	<i>E. histolytica</i> (trophozoites)	somatic antigen	lyophilized extract	Good	IHA, ID, CFT, LAT	6a	X		Yes	Yes	6
	<i>E. histolytica</i> (trophozoites)	somatic antigen	frozen extract	- 20°C 3 months	IHA, ID, IF, CFT LAT	3a	X		Yes	No	3
	<i>E. histolytica</i> (trophozoites)	frozen parasites	-	- 20°C	IFAT	1a	X		Yes	Yes	1
AMEBAE	<i>E. histolytica</i> (trophozoites)	somatic antigen	lyophilized	- 20°C 1 year	IHA, CFT, ID, IE CE	8a	X		Yes	Yes	8
	<i>L. braziliensis</i> (amastigotes)	slide	frozen parasites	- 40°C 6 months	IFAT	2-4a	X		Yes	Yes	24
	<i>L. donovani</i>	slide	frozen parasites	- 20°C 6 months	IFAT	Not published	X		No	Yes	9
	<i>L. tropica</i> (promastigotes)	somatic antigen	frozen extract	- 20°C	IFAT, CFT, IAT	3d	X		Yes	No	3
LEISHMANIA	<i>L. aethiops</i> (promastigotes)	somatic antigen	lyophilized	- 20°C poor	IHA, LT, IDI	2a	X		Yes	No	2
	<i>L. donovani</i> (promastigotes)	somatic antigen	lyophilized	- 20°C poor	IHA, LT, IDI	2a	X		Yes	No	2
	<i>L. tropica</i> (promastigotes)	somatic antigen	lyophilized	- 20°C poor	IHA, LT, IDI	2a	X		Yes	No	2
	<i>T. gondii</i> (trophozoites)	somatic antigen	frozen extract	- 20°C	CFT	Not published	X		Yes	Yes	20
TOXOPLASMA	<i>T. gondii</i> (trophozoites)	slide	frozen parasites	- 20°C 3 months	IFAT, SF	9b	X		Yes	Yes	9
	<i>T. gondii</i> (trophozoites)	somatic antigen	frozen extract	- 70°C 1 year	CFT	Not published	X		Yes	No	7
	<i>T. gondii</i> (trophozoites)	slide	frozen parasites	- 70°C	IFAT	1a	X		Yes	Yes	1
	<i>T. cruzi</i> (Epimastigotes)	somatic antigen	frozen	- 70°C 6 months	CFT	5a	X		Yes	Yes	5
TRYPANOSOMA	<i>T. cruzi</i> (Epimastigotes)	somatic antigen	liquid	4°C 6 months	IHA	5b	X		Yes	Yes	5
	<i>T. cruzi</i> (Epimastigotes)	parasites	frozen	- 25°C since 1970	IFAT	4a		X	No	No	4
	<i>T. cruzi</i> (Epimastigotes)	parasites		4°C 6 months	AGG	18a 18b	X		Yes	Yes	18

Antigen	Parasite (species and stage)	Type	State	Stability and storage	Test(s) (see p. 1 for abbreviations used)	Method of preparation (see pp. 9-11)	Availability of antigen			Available reference serum	Laboratory (see list pp. 5-8)
							Always	with notice	Not		
HELMINTHS	<i>A. lumbricoides</i> (adults)	somatic antigen	lyophilized	-20°C indefinite	CFT, ST, ID, IE	3b	X		Yes	No	3
	<i>A. lumbricoides</i> (adults)	particulate	polymerized	-20°C several months	LT	18a		X	Yes	No	19
	<i>A. lumbricoides</i> (adults)	somatic antigen	frozen	-20°C several months	CFT, IDA, ID	19b	X		Yes	No	18
	<i>A. lumbricoides</i> (larvae)	Exoantigen	lyophilized	4°C stable	Vaccination (animals)	21a		X	Yes	No	21
CAPILLARIA	<i>Capillaria hepatica</i> (eggs)	somatic antigen	lyophilized	stable	EMA, ID	Not published		X	No	Yes	11
	<i>E. granulosus</i> (cyst)	fluid	frozen	-70°C	CFT	Not published		X	Yes	Yes	7
	<i>E. granulosus</i> (cyst)	fluid	frozen	-20°C stable	BFT, IMA, CFT	10a		X	No	Yes	10
	<i>E. granulosus</i> (cyst)	fragments	frozen	-70°C 1 year	IPAT	9c		X	Yes	Yes	9
ECHINOCOCCUS	<i>E. granulosus</i> (cyst)	fluid	frozen	-70°C 4 years	IDA	9c		X	Yes	Yes	9
	<i>E. granulosus</i> (cyst)	fluid	frozen	-20°C 3 months	CFT, ST, IPAT, ID IE	3c		X	Yes	No	3
	<i>E. granulosus</i> (cyst)	fluid	liquid	4°C stable	ST, CFT, EMA	Not published		X	Yes	No	17
	<i>E. hepatica</i> (adults)	Exoantigen	lyophilized	-20°C	ID, ST			X	Yes	No	22
FASCIOLE	<i>F. hepatica</i> (adults)	somatic antigen	lyophilized	-20°C	CFT, ID, IMA, IE	3e		X	Yes	No	3
	<i>F. hepatica</i> (adults)	somatic antigen	lyophilized	-20°C	ST, IMA, CFT	Not published		X	Yes	No	17
	<i>D. immitis</i> (adults)	somatic antigen	lyophilized	-4°C 18 months	ST, CFT	14a		X	Yes	No	14
	<i>D. immitis</i> (adults)	somatic antigen	frozen	-20°C 3 months	ST, CFT	3f		X	Yes	No	3
FILARIA	<i>D. vivax</i> (adults)	Exoantigen	lyophilized	4°C stable	ST, IMA, CFT	Not published			Yes	No	13
	<i>L. carinii</i> (adults)	somatic antigen	lyophilized	4°C stable	IMA, CFT, ID	11a		X	No	Yes	11
	<i>D. vivax</i>	parasite	frozen	17 months	IPAT	1a		X	Yes	Yes	1

Antigen	Parasite (species and state)	Type	State	Stability and storage	Test(s) (see p. 1 for abbreviations used)	Method of preparation (see pp. 9-11)	Availability of antigen			Crude material availability	Available reference serum	Laboratory (see list pp. 5-8)
							Always	With notice	Not			
PARAGONYMUS	<i>P. westerni</i> (adults)	somatic antigen	lyophilized	4°C one year	ST	28a	X		No	No	26	
	<i>S. japonicum</i> (adults)	worms	lyophilized	-	-	Not published	X		Yes	-	12	
		somatic antigen	lyophilized protein fraction	4°C	ST	14b	X		Yes	No	14	
	<i>S. mansoni</i> * (adults)	somatic enzyme	lyophilized	4°C stable	ST	16a		X	No	No	16	
	<i>S. mansoni</i> (adults)	somatic antigen	frozen extract	- 20°C	Imunochemical research	Not published		X	No	No	23	
		Exoantigen	frozen	- 70°C	Imunochemical research			X	No	No	23	
	<i>S. mansoni</i> (adults)	somatic and Exoantigen	lyophilized	good	SAPA	15a		X	No	No	15	
		somatic antigen	lyophilized extract	4°C good	CFT, ST	10a		X	No	Yes	10	
		somatic and Exoantigen	lyophilized	stable	ST, CFT	17a		X	Yes	No		
		somatic antigen	lyophilized extract	4°C stable	ST	25a		X	Yes	Yes	25	
<i>S. mansoni</i> (adults)	somatic antigen	frozen	- 70°C 2 years	IHA	9d		X	No	No	9		
	somatic antigens	lyophilized	stable	CFT, ST, LAT			X	No	No	3		
TWISTIA	<i>Cysticercus cellulosae</i> (cysticercus)	Exoantigen	lyophilized	moderately stable	IHA		X	Yes	Yes	6		
	somatic antigen	lyophilized	stable	ST, IHA, CFT	Not published		X	Yes	No	17		
TOXOCARA	<i>T. canis</i> (adults)	somatic antigen	frozen	- 70°C 1 year	CFT	Not published		X	No	No	7	
	<i>T. cati</i> (adults)	somatic antigen	frozen extract	- 20°C 3 months	CFT, ST	3f		X	No	No	3	
	<i>T. spiralis</i> (adults)	somatic antigen	frozen extract	- 70°C 1 year	CFT, BF, LAT	7a		X	No	Yes	7	
TRICHINELLA	<i>T. spiralis</i> (adults)	somatic antigen	frozen extract	- 70°C	IHA, ID	9e		X	No	Yes	9	
	<i>T. spiralis</i> (adults)	somatic antigen	lyophilized	4°C several years	BF, LAT	10b		X	No	No	10	
	<i>T. spiralis</i> (adults)	somatic antigen	lyophilized	stable	SAPA	15a		X	No	No	15	

* Production will begin soon.

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Japan

COLLABORATING INSTITUTIONS
(by country)

Argentina	2
Brazil	1
Denmark	1
Egypt	2
Ethiopia	1
France	3
Germany	1
Japan	2
Panama	1
Peru	1
Poland	1
South Africa	1
Sweden	1
United States of America	<u>8</u>
	26

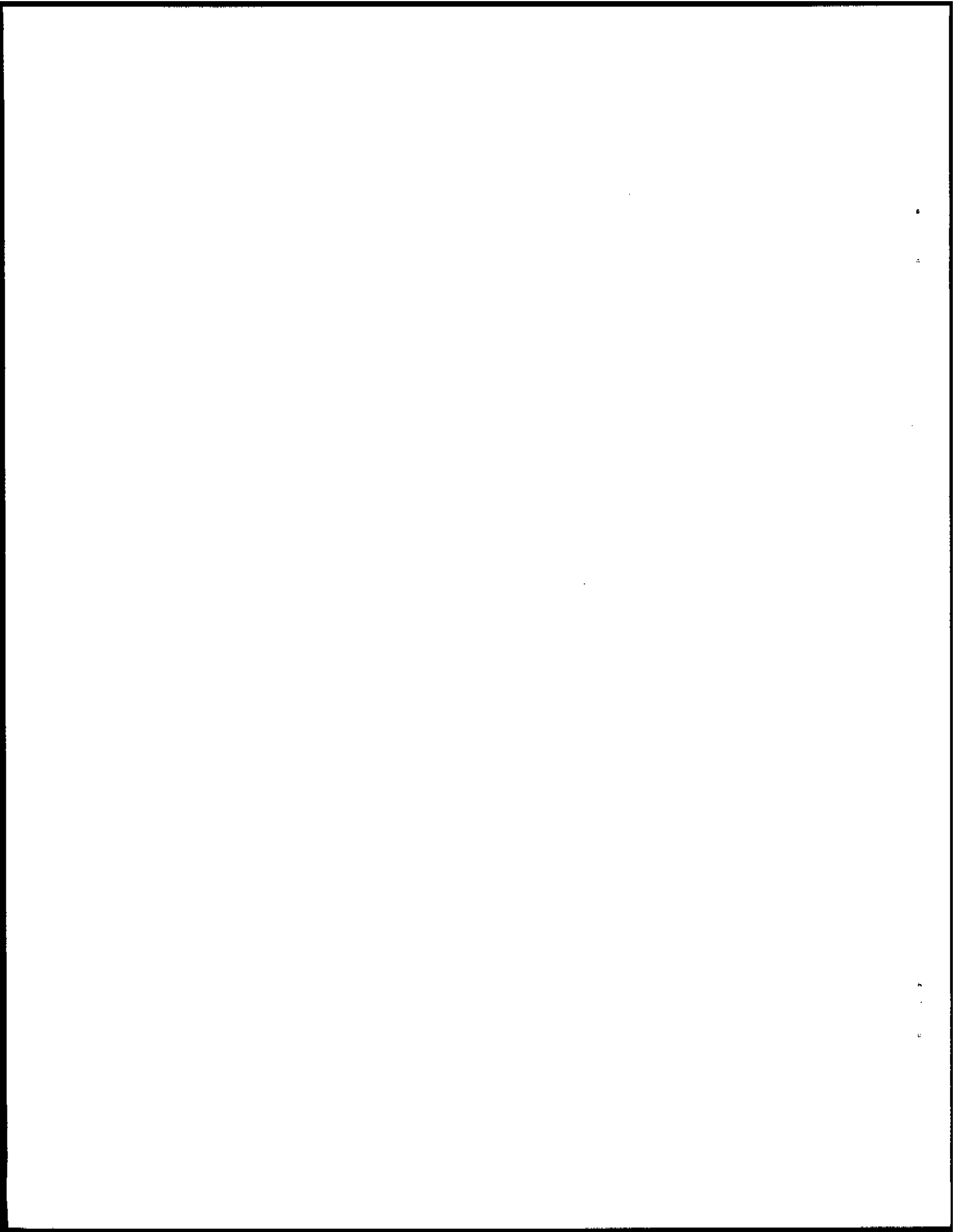
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WORLD HEALTH ORGANIZATION

Parasitic Diseases Unit

Geneva, Switzerland

PARASITE ANTIGEN REGISTER

1. Use of antigen :

- a For which infection(s) :
- b For which test(s) :
- c For man and/or which animal species :

2. Source of material for antigen :

- a Species of parasite used in preparation :
- b Strain of parasite and origin :
- c i) Stage of parasite :
- ii) Particular parasite tissues used :
- d Crude material available as : (check appropriate squares)
Fresh Lyophilized Frozen Not available
- e Maintenance :
 - i) Host :
 - ii) Culture medium or tissue culture system :

3. a If the method of preparation has been published, give reference :

- b If not, would the method be available to other investigators on request :

4. List all available assay data :

- a Chemical :
- b Biological :
- c Serological :
- d Other :

5. Your opinion as to the antigen's specificity and sensitivity (cite references) :

