

Virus Name: Yata		Abbreviation: YATAV
Status Possible Arbovirus	Select Agent No	SALS Level 2
SALS Basis Results of SALS surveys and information from the Catalogue.		
Other Information		
Antigenic Group Ungrouped		

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation DakArB 2181	Accession Number	Original Date Submitted 8/8/1984
Family Rhabdoviridae	Genus Not listed	
Information From J.P. Digoutte	Address Institut Pasteur B.P. 304 Cayenne Francaise	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) J.P. Digoutte, R. Cordellier	Isolated at Institute Bangui Centr. African Republic (1)	
Host Genus Mansonia uniformis	Species	Host Age/Stage Imagos
Sex Female		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness	Arthropod	
Time Held Alive before Inoculation		
Collection Method By hand	Collection Date 9/1/1969	
Place Collected (Minimum of City, State, Country) Birao village, Central African Republic		
Latitude 10° 17' N	Longitude 22° 47' E	
Macrohabitat Dry savannah	Microhabitat Very near Birao village	Method of Storage until Inoculated Liquid nitrogen and Revco at -75dC
Footnotes		

Section III - Method of Isolation

Inoculation Date

9/10/1969

Animal (Details will be in Section 6)

nb mice

Route Inoculated

ic and ip

Reisolation

Not tried

Other Reasons

First virus of this type in laboratory

Homologous Antibody Formation by Source Animal

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical

Pieces (number of genome segments)	Infectivity	Sedimentation Coefficients(s) (S)
Percentage wt, of Virion Protein	Lipid	Carbohydrate
Virion Polypeptides: Number	Details	
Non-virion Polypeptides: Number	Details	
Virion Density	Sedimentation Coefficients(s) (S)	
Nucleocapsid Density	Sedimentation Coefficients(s) (S)	

Stability of Infectivity (effects)

pH (infective range)

Lipid Solvent (ether - % used to test) 1:1	After Treatment Titer <2 dex	Control Titer 5.7 dex
Lipid Solvent (chloroform)	After Treatment Titer <2 dex	Control Titer 4.5 dex
Lipid Solvent (deoxycholate) 0.2%	After Treatment Titer <2 dex	Control Titer 5.0 dex
Other (formalin, radiation)		

Virion Morphology

Shape Rhabdovirus (3)	Dimensions 65 x 125 nm	
Mean nm	Range nm	
Measurement Method Electron microscopy	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Inclusion Bodies	Other	

Hemagglutination

Hemagglutination No	Antigen Source SMB ext. with sucrose-acetone	Erythrocytes (species used) Goose
pH Range 6.0-7.0	pH Optimum	
Temperature Range 4dC, RT, 37dC	Temperature Optimum	
Remarks		
Serologic Methods Recommended CF, NT		
Footnotes		

Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

CF test - homologous 64/64. Institut Pasteur (Dakar), [2] :

DakArB 2181 gives negative results with the following viruses:

Group A;	Semliki Forest virus, chikungunya, o'nyong nyong, DakHB 543 (Begoa), Sindbis, DakArY 251, Middelburg, Ndumu.
Group B;	Ntaya, Bagaza (DakArB 209), Wesselsbron, DakArY 276, West Nile, Koutango, Dakar bat, Uganda S, Saboya, Banzi, Bouboui, yellow fever, Zika, Spondweni, Bukalasa bat, Royal Farm, Kadam (UgAr 6640), DakArY 310, Usutu.
Bunyamwera;	Bunyamwera, Germiston, Ilhesha, Shokwe, Birao.
Simbu;	Ingwavuma, Simbu, DakAnB 331, DakArB 994, DakArB 1351.
Bwamba;	Bwamba, Pongola.
California;	Lumbo.
Olifantsvlei;	Olifantsvlei, Bobia, Botambi (DakArB 937).
Turlock;	Yaba 1, M'Poko (DakArB 365).
Nyando;	Nyando, Eret 147, DakArY 176.
Mossuril;	Mossuril.
Matariya;	Garba.

Eubenangee;	Pata.
Phlebotomus;	Nafada (DakArD 3150), Zinga.
NSD;	Dugbe.
Kemerovo;	Chenuda, Wad Medani.
Qalyub;	Bandia.
Quaranfil;	Quaranfil.
Bhanja;	Bhanja (DakArD 9540).
Boteke;	Boteke.
Le Dantec;	Keuraliba, Le Dantec.
Nyamanini;	Nyamanini.
Thogoto;	Thogoto.
Ungrouped;	Witwatersrand, Okola, Nkolbisson, Tataguine, Lebombo, Tanga, Jos (DakArD 3491), Gossas, DakArD 4499 (Somone), Toure, DakArD 8194 (Hann), Bangoran, Sandjimba, Landjia, Gomoka, DakArB 2882 (Nola).
Nonarbovirus;	Herpesvirus (DakHB 3667).

In addition DakArB 2181 antigen failed to react with the following immune fluids:

Group B;	Entebbe bat, Montana Myotis leukoencephalitis, dengue 1, 2, 3, 4, Th Sman, TH-36.
Simbu;	Sango, Shamonda, Sabo, Shuni, Sathuperi, Yaba 7.
California;	Group serum.
Tete;	Tete, Matruh.
EHD;	IbAr 22388 (Abadina), IbAr 22619.
Matariya;	Matariya, Burg el Arab.
Corriparta;	Acado.
VSV;	Chandipura (IbAn 9978).
Phlebotomus;	Group serum. Arumowot (IbAn 15736).
Kaisodi-Qalyub-Quaranfil;	Group serum (Johnston Atoll, Kaisodi, Bandia, Silverwater, Quaranfil, Lanjan, Qalyub).
Uukuniemi;	Grand Arbaud, Ponteves, EgAn 1825.
Congo;	Congo.

Bluetongue;	Type 7 (IbAn 22703), type 10 (IbAr 22618).
Rabies serogroup;	kotonkan, Lagos bat.
Ungrouped;	SudAr 1275/64, IbAn 2898 (Oyo), IbAn 17143, Mount Elgon bat, IbAn 33709, IbAn 28946.
Nonarboviruses;	LCM-rabies, IbAn 27377 and IBH 29777 (related to rabies), IbAn 20433 (NDV).

Results indicate that DakArB 2181 is apparently a new virus.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection							Growth Without CPE +/- (g)		
		CPE			PLAQUES						
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)				

Section VII - Natural Host Range (Additional text can be added below table)

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Mansonia uniformis	1/36 pools		Central African Republic

Section VIII - Susceptibility to Experimental Infection (include viremia)

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)	SMB 15	ic 0.02	Death	4	4.5
Mice (nb)		ip 0.03	Death		
Mice (nb)		sc			
Mice (wn)		ic 0.03	No illness		
Mice (wn)		ip 0.1	Antibody		

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected	Days	°C	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)

Inclusion Bodies

Intranuclear

Organs/Tissues Affected

Category of tropism

Section XI - Human Disease

In Nature	Residual	Death
Subclinical	Overt Disease	
Clinical Manifestations		
Number of Cases	Category (i.e. febrile illness, etc.)	

Section XII - Geographic Distribution

Known (Virus detected) Central African Republic
Suspected (Antibody only detected)

Section XIII - References

1. Rapport Annuel de l'Institut Pasteur de Bangui. 1969. p. 51.
2. Robin, Y. Institut Pasteur de Dakar. Personal communication.
3. El Mekki, A., et al. In: Ebola Hemorrhagic Fever. S.R. Pattyn (ed.) Amsterdam. Elsevier-North Holland Press. 1978. pp. 261-267.

Remarks

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