

Virus Name: Bangui		Abbreviation: BGIV
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 DakHB 754	Accession Number	Original Date Submitted 11/19/1984
Family Rhabdoviridae	Genus Not listed	
Information From J.P. Digoutte	Address Institut Pasteur, B.P. 923, Bangui, Central African Republic	
Information Footnote Reviewed by editor		

Section II - Original Source

Isolated By (name) J.P. Digoutte	Isolated at Institute Institut Pasteur, Bangui (1)	
Host Genus Man	Species	Host Age/Stage 29 years
Sex Male		
<u>Isolated From</u>	<u>Isolation Details</u>	
Signs and Symptoms of Illness Fever with rash and headache	Arthropod	
Time Held Alive before Inoculation		
Collection Method Venipuncture	Collection Date 5/16/1970	
Place Collected (Minimum of City, State, Country) Bangui, Central African Republic		
Latitude 4° 22' N	Longitude 18° 35' E	
Macrohabitat Large town	Microhabitat Tropical; hot, humid	Method of Storage until Inoculated Room temperature
Footnotes		

Section III - Method of Isolation

Inoculation Date 5/16/1970	
Animal (Details will be in Section 6) nb mice	
Route Inoculated ic and ip	Reisolation No
Other Reasons First virus of thistype in the laboratory	
Homologous Antibody Formation by <u>Source Animal</u> Yes	
Test(s) Used NT	
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)	
<hr/>		
<u>Stability of Infectivity (effects)</u>		
pH (infective range)		
Lipid Solvent (ether - % used to test) 1:1	After Treatment Titer 2.3 dex	Control Titer 5.5 dex
Lipid Solvent (chloroform)	After Treatment Titer <2.0 dex	Control Titer 5.0 dex
Lipid Solvent (deoxycholate) 0.2%	After Treatment Titer 3.0 dex	Control Titer 5.1 dex
Other (formalin, radiation)		
<hr/>		
<u>Virion Morphology</u>		
Shape	Dimensions	
Mean nm	Range nm	
Measurement Method	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. by 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 titer = 16/64. (Institut Pasteur Dakar) (2).

DakHB 754 did not react with the following viruses:

Group A;	Semliki Forest Virus, chikungunya, o'nyong nyong, Begoa (DakHB 543), Sindbis, DakArY 251, Middelburg, Ndumu.		
Group B;	Ntaya, Bagaza (DakArB 209), Wesselsbron, DakArY 276, West Nile, Koutango (DakAnD 5443), Dakar bat, Uganda S, Saboya (DakAnD 4600), Banzi, Bouboui, yellow fever, Zika, Spondweni, Bukalasa bat (DakAnD 595), Royal Farm (UART 285), Kadam (UgAr 6640), DakArY 310, Usutu.		
Bunyamwera;	Bunyamwera, Germiston, Ilhesha, Shokwe, Birao (DakArB 2198).		
Simbu;	Ingwavuma, Simbu, DakAnB 331, DakArB 994, DakArB 1351.		
Bwamba;	Bwamba, Pongola.	California;	Lumbo.
Olifantsvlei;	Olifantsvlei, Bobia (DakArB 1569).		
Turlock;	Yaba 1, M'Poko (DakArB 365).		
Nyando;	Nyando, Eret 147, DakArY 176.	Mossuril;	Mossuril.
Matariya;	Garba (DakAnB 423).	Eubenangee;	Pata (DakArB 1327).
Phlebotomus fever;	Nafada (DakAnD 3150).	NSD;	Dugbe, DakAnB 373.
Kemerovo;	Chenuda, Wad Medani.	Oalvub;	Bandia.

Quaranfil;	Quaranfil.
Others;	Witwatersrand, Okola, Nkolbisson, Tataguine, Lebombo, Tanga, Nyamanini, Thogoto, Jos (DakArD 3491), Bhanja (DakArD 9540), Gossas (DakAnD 401), Le Dantec (DakHD 763), Somone (DakArD 4499), Toure (DakAnD 4611), Keuraliba (DakAnD 5314), Hann (DakArD 8194), Botambi (DakArB 937), Boteke (DakArB 1077), Zinga (DakArB 1976), Bangoran (DakArB 2053), Sokoumba (DakArB 2078), Yata (DakArB 2181), Landjia (DakAnB 769), Bambio (DakArB 2712), Gomoka (DakArB 2846), Nola (DakArB 2882) DakArY 347.
Nonarbovirus;	Herpesvirus (DakHB 3667).

In addition DakHB 754 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, Ingwavuma (IbAn 28558).		
California;	Group serum.		
Tete;	Tete (SAAn 3518), Matruh (EgAn 1047).		
EHD;	IbAr 22619.		
Matariya;	Matariya (EgAn 1477/61), Burg el Arab (EgAn 3782/62).		
Corriparta;	EthAr 1846/64.	VSV;	Chandipura (IbAn 9978).
Phlebotomus fever;	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).		
Others;	SudAr 1275/64, Abadina (IbAr 22388), IbAr 23380, Oyo (IbAn 2898), IbAn 17143, Lagos bat, Mount Elgon bat, IbAn 33709, IbAn 28946, SAAn 4511.		
Nonarboviruses;	LCM, rabies, IbAn 27377 and IbH 29777 (related to rabies), IbAn 20433 (NDV).		

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
Blood (M)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection						
		CPE			PLAQUES			Growth Without CPE +/- (g)
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	
DE (PC)	P11 SM1					No plaques	<3.0*(3)	
Vero (CL)					6	Plaques	7.8 (3)	
LLC-MK2 (CL)						No plaques	<3.0 (3)	
Xenopus laevis (CL)			CPE (4)					
Vero (CL)			CPE (4)					

* Expressed in dex

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
Man	1		Bangui, Central African Republic
Man		15/20 NT	

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 log ₁₀ /ml
Mice (nb)	SMB 9	ic 0.02	Death	4	5
Mice (nb)		ip			
Mice (nb)		sc			
Mice (wn)		ic 0.03	Not pathogenic		
Mice (wn)		ip 0.1	Not pathogenic		

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log ₁₀ /ml (b)		Incubation period (c)		Transmission by bite (d)		Assay of arthropod, log ₁₀ /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

<ol style="list-style-type: none">1. Rapport Annuel de l'Institut Pasteur de Bangui. 1970.2. Digoutte, J.P., et al. 1973. Ann. Microbiol. (Inst. Pasteur), 124A:147-153.3. Lazuick, J. Personal communication. 1979.4. El Mekki, et al. 1981. Trans. Roy. Soc. Trop. Med. Hyg. 75:799-806.

Remarks

There is no evidence at present to indicate that this is an arbovirus (2). The registration is made provisionally for informational purposes. (Y.R.)
