

Status: Possible Arbovirus

Select Agent:

SALS Level: 2

SALS Basis: S

Antigenic Group: Ungrouped

HEPA Filtration:

Taxonomic status: Not listed

Other Information: None.

Section I - Full Virus Name and Prototype Number**Full Virus Name:** **Prototype Number:****Sandjimba** DakAnB 373d**Information from:** J.P. Digoutte

* Date: 8/8/1984

Address: Institut Pasteur B.P. 304 Cayenne Guyane Francaise

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Reviewed by editor

Section II - Original Source**Isolated by:** J.P. Digoutte, J. Moindrot **at:** Bangui, Central African Republic (1,2)**Genus and species:** Acrocephalus schoenobaenus **Sentinel X****Age/Stage:** Adult **Sex:**

Isolated From	Isolation detail
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Signs and symptoms of illness:**Arthropod engorged depleted gravid****Time held alive before inoculation:****Collection date:** 1/24/1970 **Method:** Collected by net**Place collected:** Landjia, Central African Republic**Latitude:** 4° 22' " N **Longitude:** 18° 39' " E**Macrohabitat:** Forest savannah mosaic**Microhabitat:** Ranch ten kilometers east of Bangui**Method of storage until inoculated:** Revco at -75dC**Footnotes:****Section III - Method of Isolation and Validity****Inoculation Date:** 4/1/1970**Animal:** nb mice **Embryonated egg:** **Tissue Culture:**

(Details in Section VI - Biologic Char.)

Route inoculated: ic and ip **Reisolation:** No**Other reasons:** First virus of this type in laboratory**Homologous antibody formation by source animal (See Section II):****Test used:** HI CF NT**Other:****Footnotes:**

Section IV - Virus Properties

Physicochemical:

RNA: DNA: Single Strand: Double Strand:
Pieces: Infectivity: Sedimentation coefficient(s): /strong>
Percentage wt. of virion protein , lipid carbohydrate
Virion polypeptides:
Number: Details:
Non-virion polypeptides:
Number: Details:
Virion density: Sedimentation coefficient:
Nucleocapsid density Sedimentation coefficient:

Stability of infectivity (effects) pH

Lipid solvent:
(ether) 1:1 After treatment titer <2 dex Control titer 4.6 dex
(chloroform) After treatment titer 3 dex Control titer 6.0 dex
Detergent:
(deoxycholate) 0.2% After treatment titer <2 dex Control titer 4.6 dex
Other (formalin, radiation):

Virion morphology:

Shape Dimensions
Mean (nm) range (nm) how measured
Surface projections, envelope
Nucleocapsid dimensions, symmetry

Morphogenesis:

Site of constituent formation in cell
Site of virion assembly
Inclusion bodies
Other

Hemagglutination:

Hemagglutination No Antigen source SMB ext. with sucrose-acetone
Erthrocytes Goose pH range 6.0-7.0 pH optimum
Temperature optimum range 4dC, RT, 37dC
Remarks
Serologic methods recommended CF, NT
Footnotes:

Section V - Antigenic Relationship And Lack of Relationship To Other Viruses

CF tests - homologous titer 16/4. Institut Pasteur (Dakar).
DakAnB 373d 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;	Simbu, Ingwavuma, DakAnB 331, DakArB 994, DakArB 1351.
Bwamba;	Bwamba, Pongola.
California;	Lumbo.
Olifantsvlei;	Olifantsvlei, Bobia.
Turlock;	Yaba 1, M'Poko (DakArB 365).
Nyando;	Nyando, Eret 147, DakArY 176.
Mossuril;	Mossuril.
Mayariya;	Garba.
Eubenangee;	Pata.
Phlebotomus;	Nafada (DakAn D 3150).
NSD;	Dugbe.
Kemerovo;	Chenuda, Wad Medani.
Qalyub;	Bandia.
Quaranfil;	Quaranfil.
Miscellany;	Witwatersrand, Okola, Nkolbisison, Tataguine, Lebombo, Tanga, Nyamanini, Thogoto, Jos (DakArD 91), Bhanja (DakArD 9540), Gossas, Le Dantec, DakArD 4499 (Somone), Toure, Keuraliba, Botambi, Zinga, Bangoran, Yata, Landjia, Gomoka, DakArB 2882 (Nola), Dak HB 754 (Bangui), DakAnB 1094 (Kolongo), DakAnB 1054 (Bimbo), DakAnB 277, DakAnB 1582 (Ouango), DakAnB 512r (Saint Floris), DakAnB 188.
Nonarbovirus;	Herpes virus (HB 3667).

In addition DakAnB 373d 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-strain NJ;	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).
Miscellany;	SudAr 1275/64, IbAr 23388 (Abadina), IbAr 23380, IbAn 2898 (Oyo), IbAn 17143, Lagos bat, Mount Elgon bat, IbAn 33709, IbAn 28946.
Nonarbovirus;	LCM, rabies, IbAn 27377 and IbH 29777 (related to rabies), IbAn 20433 (NDV).

Results indicate that DakAnB 373d is apparently a new virus.

Section VI - Biologic Characteristics

Virus source (all VERTEBRATE isolates): CNS (LV), heart (LV), liver (LV), and spleen (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS): Newborn mice

Susceptibility of Cell Culture Systems:

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

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Acrocephalus schoenobaenus(bird)	1/1		Central African Republic

Section VIII - Susceptibility To Experimental Infection (Record 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	3	6.0	
Mice (nb)		ip 0.03	No illness			
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) Days	Transmission by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected		°C	Host	Ratio	Whole	Organ

Section X - Histopathology

Character of lesions:

Inclusion bodies:

Cytoplasmic:(M) (LV) Intranuclear: (M) (LV)

Organs-tissues affected:

Category of tropism:

Section XI - Human Disease

Human disease:	In nature:	(S) (R)
	Death:	(S) (R)
	Residua:	(S) (R)
Laboratory infections:	Subclinical:	(S) (R)
	Overt Disease:	(S) (R)

Clinical manifestations:

Category: No. of cases:

Section XII - Geographic Distribution

Known (virus):

Central African Republic

Section XIII - References

1. Rapport Annuel de l'Institut Pasteur de Bangui. 1970. p. 50
2. Rapport Annuel de l'Institut Pasteur de Bangui. 1972. p. 38.
3. Robin, Y. Institut Pasteur de Dakar. Personal communication.

Section XIV - Remarks
