Virus Name: Sakpa	Abbreviation: SPAV

Status
Possible Arbovirus

Select Agent
No

SALS Level
3

SALS Basis
Isufficient experience with virus; i.e., experience factor from SALS surveys was less than 500 in laboratory facilities with low biocontainment.

Other Information

Antigenic Group
ungrouped

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation
AnB 1398

Accession Number

Original Date Submitted
10/2/1984

Family
unclassified

Genus

Information From
J.P. Digoutte

Address
Institut Pasteur, B.P. 304, 97305 Cayenne, Guyane Francaise

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)
J.P. Digoutte and M. Germain

Isolated at Institute
Bangui, Central African Republic

Host Genus
Praomys (= Mastomys)

Species

Host Age/Stage
adult

Sex
Male

Isolated From

Isolation Details

Signs and Symptoms of Illness
organs/tissues

Arthropod

Time Held Alive before Inoculation

Collection Method
by trap

Collection Date
2/20/1972

Place Collected (Minimum of City, State, Country)
Botambi

Latitude
4° 12' N

Longitude
18° 30' E

Macrohabitat
clearing in equatorial moist forest

Microhabitat
banana plantation

Method of Storage until Inoculated
revoc at -75dC

Footnotes

Section III - Method of Isolation

Inoculation Date
3/22/1972

Animal (Details will be in Section 6)
nb mice

Route Inoculated
ic and ip

Reisolation
No

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)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform) **5%**	After Treatment Titer **<1.5 dex**	Control Titer **5.5 dex**
Lipid Solvent (deoxycholate)	After Treatment Titer	Control Titer

Other (formalin, radiation)

Virion Morphology

Shape	Dimensions	
Mean nm	Range nm	
Measurement Method **filtration through Millipore 450nm; after filtratiion titer**	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

3.1. Control titer 5.5

Morphogenesis

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

Hemagglutination

Hemaggiutination	Antigen Source	Erythrocytes (species used)
No	**SMB ext. by sucrose-acetone**	**goose**
pH Range **5.8-6.8**	pH Optimum	
Temperature Range	Temperature Optimum **room temperature**	

Remarks

Serologic Methods Recommended
CF

Footnotes

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

CF test - Homologous titer = 32/2 Institut Pasteur (Dakar) [2] .

AnB 1398 gives negative results with the following viruses: Group A; Semliki Forest virus, chikungunya, o'nyong-nyong, Igbo-Ora (B 543), Sindbis, ArY 251, Middleburg, Ndumu. Group B; Ntaya, Bagaza (ArB 209), Wesslesbron, ArY 310, Usutu, ArY 276, West Nile, Koutango (AnD 5443), Dakar bat, Uganda S, Saboya (AnD 4600), Banzi, Bouboui (ArB 490), yellow fever, Zika, Spondweni, Bukalasa bat (AnD 595), Royal Farm (T 285), Kadam (UgAr 6640), Cambodia (AnC 38), AnY 589. Bunyamwera; Bunyamwera, Germiston, Ilesha, Shokwe, Birao (ArB 2198). Simbu; Buttonwillow, Ingwavuma, Simbu, Nola (ArB 2882). Bwamba; Bwamba, Pongola. California; Lumbo. Olifantsvlei; Olifantsvlei, Bobia (ArB 1569), Botambi (ArB 937). Tete; Tete (SAAN 3518), Bahig (EgB 90), Matruh (EgAn 1047), DakAnB 1442, AnB 1292, AnB 1544, AnB 1564. Phlebotomus; Arumowot (SudAr 1284), Gabek Forest (AnD 3150), Gordil (AnB 496), Saint-Floris (AnB 512-Re), Zinga (ArB 1976). Boteke; Boteke (ArB 1077), Zingilamo (AnB 1245). Corriparta; Acado (EhAr 1846), Corriparta, ArB 3689. Eubenangee; Eubenangee (In 1074), Pata (ArB 1327). Matariya; Burg el Arab (EgAn 3782), Matariya (Eg 1477), Garba (AnB 423). Mossuril; Bangoran (ArB 2053), Mossuril, Kamese. Nyando; Eret 147 (AnY 176), Nyando. Turlock; Yaba 1 (ArB 365). Congo; Congo (IbAr 10200). NSD; Dugbe (IbAn 1792). Kemerovo; Chenuda, Wad Medani. Qalyub; Bandia (ArD 611), Qalyub (EgAr 370). Quaranfil; Quaranfil. Thogoto; Thogoto. Bhanja; Bhanja (ArD 9540). Keuraliba; Keuraliba (AnD 5314), Le Dantec (HD 763). Nyamanini; Nyamanini. Ungrouped; Lebombo, Nkolbisson, Okola, Tanga, Tataguine, Witwatersrand, Orungo (ArB 2078), SudAr 1275, Jos (ArD 15131), Somone (ArD 4499), IbAn 39048 (ArY T 34), Gossas (AnD 401), Toure (AnD 6411), Yogue (AnD 5634), AnD 11411, Yata (ArB 2181), Bangui (HB 754), Landjia (AnB 769), Gomoka (AnB 787), Kolongo (AnB 1094), Bimbo (AnB 1054), Ouango (AnB 1582), Bobaya (AnB 2208), Sandjimba (AnB 373), Ippy (AnB 188), Koumbala (AnB 160), AnB 277, AnB 1227, AnB 1398, AnB 904. AnYV 6, AnYV 177. Non arbovirus; herpesvirus (HB 3667).
AnB 1398 antigen failed to react with the following immune fluids: Group B; Entebbe bat, Montana Myotis leukoencephalitis, dengue1, 2, 3, 4, Potiskum (IbAn 10069). Simbu; Sango, Shamonda, Sabo, Shuni, Sathuperi, Yaba 7. California; Group serum. EHD; IbAr 22619. VSV; Chandipura (IbAn 9978). Phlebotomus; Goup serum. Kaisodi-Qalyub-Quaranfil; Serum polyvalent (Johnston Atoll, Kaisodi, Bandia, Silverwater, Quaranfil, Lanjan, Qalyub). Oukuniemi; Grand Arbaud, Ponteves, EgAn 1825. Bluetongue; Type 10 (IbAr 22618). AHS; IbAn 53177. Rabies serogrouped; Lagos bat. Ungrouped; IbAr 23380, IbAn 2898 (Oyo), IbAn 17143, Mount Elgon bat, IbAn 33709, IbAn 218946, EgAn 1398/61 (IbAn 39652). Non arbovirus; LCM-Rabies, IbAn 27377 and IbH 29777 (related to rabies), IbAn 20433 (NDV).
In addition, AnB 1398 antigen was screened against and gave negative results with NIH immune grouping fluids.

Results indicate that ArB 1398 is apparently a new virus.

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)
brain (LV), liver (LV), spleen (LV), heart (LV)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
newborn mice

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

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
Praomys (rodent; organs)	1/168		Central African Republic (1)

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 6	ic 0.02	death	3	6
mice (nb)		ip 0.02	death		
mice (nb)		sc			
mice (wn)		ic 0.03	death		5
mice (wn)		ip 0.03	death		
mice (ad)		ic 0.03	death		
mice (ad)		ip 0.1	death		

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmision 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)
mouse brain; large focal necrosis in cortex and hippocampus, important meningeal reaction with granulocytes.

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)

Suspected (Antibody only detected)

Section XIII - References

1. Digoutte, J.P. 1972. Rapport Annuel de l'Institut Pasteur de Bangui. p. 30.
2. Robin, Y. Personal communication.

Remarks